1996

ANNUAL FINANCIAL REPORT

State Employes' Retirement System

COMMONWEALTH *of* PENNSYLVANIA

Including the Independent Auditors' Report on Financial Statements for the years ended December 31, 1996 and 1995

Acknowledgments:
Photograph: model of the statue "Commonwealth" by Roland Hinton Perry
As described in Pennsylvania's Capitol, *by Ruth and Blair Seitz, the statue "has topped the Capitol Dome since 1905. Facing west, she balances on a gilt ball ... [h]er right arm extends in mercy while her other hand grasps a ribboned staff, a symbol of justice."*

Photograph by Commonwealth Media Services, Pennsylvania Department of General Services

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Including the Independent Auditors' Report on Financial Statements for the years ended December 31, 1996 and 1995

COMMONWEALTH OF PENNSYLVANIA
STATE EMPLOYES' RETIREMENT BOARD
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NICHOLAS J. MAIALE
CHAIRMAN

June 1997

Honorable Tom Ridge, Governor
Commonwealth of Pennsylvania

Members, Pennsylvania General Assembly
Members, Pennsylvania State Employes' Retirement System

Dear Governor Ridge, Legislators and Members:

The Board of Trustees of the Pennsylvania State Employes' Retirement System (SERS) is pleased to present our *Annual Financial Report* on the SERS Fund for calendar year 1996.

As chairman of the SERS Board, I am pleased to note that the Fund had a 15.9% total investment rate of return in 1996 and a total market value of $18.5 billion as of December 31, 1996. By comparison, the Fund's annualized investment rate of return for the past five years was 11.8%, and the annualized investment rate of return for the past 10 years was 11.5%.

These substantial returns have enabled SERS to maintain fully-funded status since 1992. They also validate the Board's adherence to two key principles:

- prudent management of fund assets, and
- ensuring payment of benefits promised by the Commonwealth to SERS retirees and beneficiaries.

Rest assured that the SERS Board, staff and I will continue to pursue prudent investment strategies to assure the solvency of the Fund and the quality of pension-related services to all SERS members.

Sincerely,

Nicholas J. Maiale
SERS Board Chairman

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Board of *TRUSTEES*

Administrative SUPPORT

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Executive Director

Dale H. Everhart
Assistant Executive Director

Francis J. Donlevy
Director of Financial Management

Harold E. Dunbar
Chief Counsel

Geoffrey S. Yuda
Information Officer

Peter M. Gilbert
Chief Investment Officer

David J. Kalman
Karen N. Nicely
Diane Sterthous
John C. Winchester
Investment Office Directors

Leonard M. Knepp
Director, Internal Audit

Investment CONSULTANTS

RogersCasey & Associates
General Consultant

Cambridge Associates
Venture Capital and Alternative Investments Consultant

The Townsend Group
Real Estate Consultant

Hamilton Lane
Specialty Consultant

General Service PROVIDERS

Hay/Huggins Company, Inc.
Actuary

State Street Bank
Agent Bank and Trust Accounting Services

KPMG Peat Marwick LLP
Independent Auditor

Mission *STATEMENT*

I. Plan Administration: To administer the retirement benefits plan for state employes and elected officials in accordance with Pennsylvania statutes;

II. Member Services: To provide effective services to all active and retired members;

III. Management of Retirement Fund Assets: To accumulate, manage and disburse the retirement Fund assets in accordance with fiduciary standards and at a reasonable cost to Commonwealth taxpayers;

IV. Investment Policy: To maximize investment returns while exercising a prudent person investment policy.

Investment *POLICY*

The State Employes' Retirement Board adopted a formal Statement of Investment Policy in 1979. It has been revised periodically, principally to reflect and incorporate legislative changes governing investments. The purpose of the statement is to formalize the Board's investment objectives, policies, and procedures, to establish guidelines for the investment of Fund assets, and to define the duties and responsibilities of the various entities involved in the investment process. The major elements of the statement are:

- As fiduciaries, the Board will exercise that degree of judgment, skill, and care under the circumstances then prevailing which persons of prudence, discretion, and intelligence, who are familiar with such matters, exercise in the management of their own affairs in investment matters;
- The Fund's overall investment objective is to provide a total rate of return, over full economic cycles, which exceeds the return of a fully diversified market portfolio within each asset class. The Board seeks to meet this objective within acceptable risk parameters through adherence to a policy of diversification of investments by type, industry, quality, and geographic location;
- The Board employs an investment staff and also contracts with investment advisors and consultants to provide expert, professional judgment in all investment decisions;
- An annual Investment Plan is prepared to control the allocation of funds during the year among investment advisors and categories of assets;
- Guidelines are established for each category of assets used by the Fund's investment advisors to provide a framework for monitoring quality, diversification, and liquidity; and
- Where investment characteristics, including yield, risk, and liquidity, are equivalent, the Board's policy favors investments which have a positive impact on the economy of Pennsylvania.

Investment *OBJECTIVES*

To assure an adequate accumulation of reserves in the Fund at the least cost to the citizens of the Commonwealth and to provide some protection against the erosion of principal by inflation, the long-term investment objectives of the Fund, are:

- Achieve and maintain the State Employes' Retirement Fund in excess of Actuarial Accrued Benefit Liability;
- Over the long run, achieve a positive real total rate of return (with inflation measured by the GDP Implicit Price Deflator);
- Over the long run, achieve an absolute total rate of return not less than the actuarial investment return assumption;
- Achieve in Domestic Stocks a total return that exceeds the total return of the Wilshire 5000 Index;
- Achieve in International Stocks a total return that exceeds the total return of the SERS Custom International Stock Index;
- Achieve in the Fixed Income asset class a total return that exceeds the total return of the SERS Fixed Income Custom Index;
- Achieve in the Equity Real Estate asset class a total return that exceeds the total return of the NCREIF Index;
- Achieve in the Cash asset class a total return that exceeds the total return on U.S. Treasury Bills (90 days);
- Achieve in the Venture Capital asset class a total return that exceeds either the Venture Economics' relevant Vintage Year Median Returns or relevant returns furnished for benchmark purposes by SERS's Venture Capital/Alternative Investments consultant;
- Achieve in the Alternative Investments asset class a total return that exceeds either market returns for similar types of alternative investments or relevant returns furnished for benchmark purposes by SERS's Venture Capital/Alternative Investments consultant.

Total return includes income and both realized and unrealized gains and losses and is computed on market value. The Board seeks to meet these objectives within acceptable risk parameters through adherence to a policy of diversification of investments by type, industry, investment manager style, and geographic location.

Section 1

INVESTMENT PROGRAM OVERVIEW *and* SUMMARY *of* ASSET CLASSES

Investment *PROGRAM SUMMARY*

SERS's assets are administered by the SERS Board of Trustees. The Board has adopted an Investment Policy that incorporates the provisions of Pennsylvania's Retirement Code, which governs the investment of SERS's assets. The policy provides investment objectives and guidelines. An Investment Plan is reviewed and updated annually for strategic asset allocation purposes as well as for diversification needs within each asset class.

SERS invests in eight major asset classes and uses external investment advisors with various investment styles as a method to ensure overall fund diversification. As of December 31, 1996, SERS's asset class allocation was as follows: 59.4% stocks; 23.8% fixed income; 1.2% cash; 5.1% tactical asset allocation (TAA); 7.6% real estate; 1.3% venture capital; and 1.6% alternative investments.

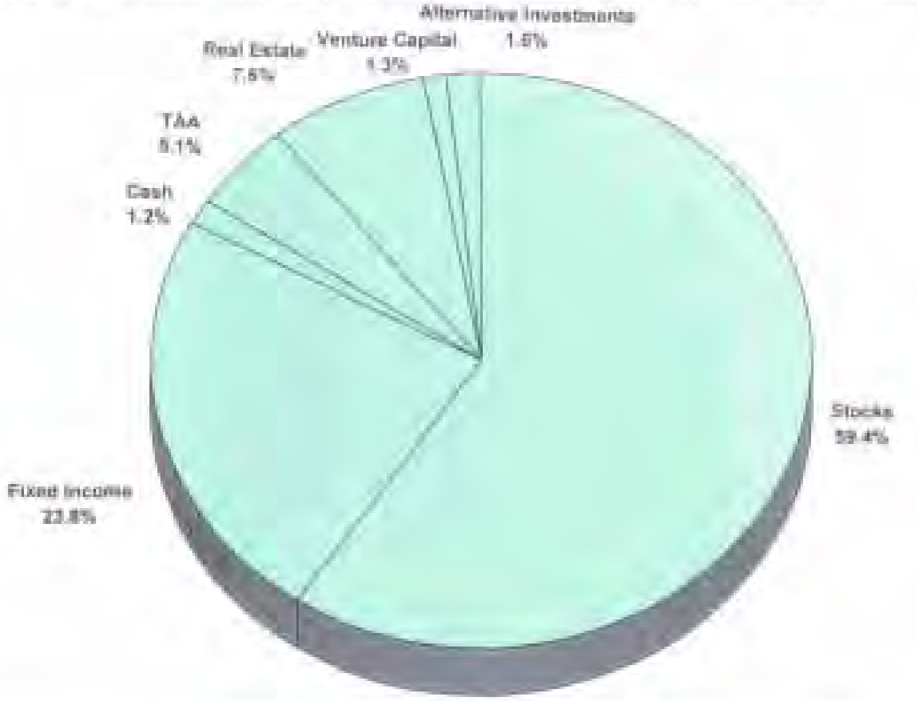
Asset allocation is perhaps the most important investment decision of the fund, accounting for as much as 90% of the fund's return performance. Asset allocation policies have a long-term focus and may take several years to implement fully.

SERS Fund asset classes by market values and long-term target allocation as of December 31, 1996 ($ in millions)

Asset Class	Market Value	1996 Allocation	1996 Target Allocation
Domestic Stocks	$7,584.3	41.0%	39.0%
International Stocks	3,406.3	18.4%	20.0%
Fixed Income	4,395.7	23.8%	23.0%
Cash	226.9	1.2%	1.0%
Tactical Asset Allocation	945.3	5.1%	5.0%
Real Estate	1,413.6	7.6%	9.0%
Venture Capital	242.7	1.3%	1.3%
Alternative Investments	305.4	1.6%	1.7%
Total	**$18,520.3**	**100.0%**	**100.0%**

Numbers may not add due to rounding.

SERS Fund asset allocation as of December 31, 1996, by asset class and percentage



Investment *ADVISORS and PORTFOLIOS*

As of December 31, 1996, SERS had retained the services of 96 external investment advisors, including:

- 17 domestic stock investment advisors
- 12 international stock investment advisors
- 2 currency overlay investment advisors
- 11 fixed income investment advisors
- 2 cash investment advisors
- 1 tactical asset allocation investment advisor
- 15 real estate investment advisors
- 21 venture capital limited partnership managing general partners
- 15 alternative investment limited partnership managing general partners

In addition, four alternative investment and two fixed income relationships were approved by the Board but not yet funded at the end of 1996.

As of December 31, 1996, SERS's 96 external investment advisors managed 126 investment portfolios/accounts, including:

- 20 domestic stock portfolios
- 13 international stock portfolios
- 2 currency overlay portfolios
- 13 fixed income portfolios
- 3 cash portfolios
- 1 tactical asset allocation portfolio
- 25 real estate portfolios
- 27 venture capital limited partnership interests
- 22 alternative investment limited partnerships

In addition, four venture capital partnerships, five alternative investment partnerships and two fixed income portfolios were approved by the Board but not yet funded at the end of 1996. Several investment advisors manage multiple portfolios for SERS.

Asset Allocation *as of December 31, 1996*

Domestic Stocks	($ in millions) Market Value	% of Domestic Stocks	% of Total Stocks	% of Total Fund
Passively Managed Portfolios				
Barclays - Equity Index Fund P	$3,003.2	39.6%	27.4%	16.2%
Barclays - Extended Equity Market Fund	844.0	11.1%	7.7%	4.6%
Domestic Passive Stocks Total	$3,847.2	50.7%	35.0%	20.8%
Actively Managed Portfolios				
Dietche & Field Advisors	$71.3	0.9%	0.6%	0.4%
Emerald Advisors - PA	64.0	0.8%	0.6%	0.3%
Fidelity Management Trust Company	116.3	1.5%	1.1%	0.6%
Iridian Asset Management	263.4	3.5%	2.4%	1.4%
Loomis, Sayles & Company	117.6	1.5%	1.1%	0.6%
Lord, Abbet & Co.	230.8	3.0%	2.1%	1.2%
MacKay Shields Financial Corp.	122.2	1.6%	1.1%	0.7%
Mellon Equity Associates - PA	66.5	0.9%	0.6%	0.4%
Mellon Equity Associates - Special	548.2	7.2%	5.0%	3.0%
Miller, Anderson & Sherrerd	456.0	6.0%	4.2%	2.5%
J.P. Morgan Investment Management	124.4	1.6%	1.1%	0.7%
Neuberger & Berman	70.8	0.9%	0.6%	0.4%
Pilgrim, Baxter & Associates	278.3	3.7%	2.5%	1.5%
Provident Investment Counsel	543.9	7.2%	5.0%	2.9%
Provident Investment Counsel - Stellar	94.0	1.2%	0.9%	0.5%
Sturdivant & Co.	36.4	0.5%	0.3%	0.2%
Trinity Investment Management	519.5	6.8%	4.7%	2.8%
Zevenbergen Capital	13.5	0.2%	0.1%	0.1%
Domestic Active Stocks Total	$3,737.1	49.3%	34.0%	20.2%
Domestic Stocks Total	$7,584.3	100.0%	69.1%	41.0%

International Stocks		% of International Stocks		
Passively Managed Portfolios				
Barclays - Europe Funds	$354.2	10.4%	3.2%	1.9%
Barclays - Australia/New Zealand Funds	40.0	1.2%	0.4%	0.2%
International Passive Stocks Total	$394.2	11.6%	3.6%	2.1%
Actively Managed Portfolios				
BEA Associates - core	$432.1	12.7%	3.9%	2.3%
GAM International Management	157.0	4.6%	1.4%	0.8%
Marathon Asset Management	183.2	5.4%	1.7%	1.0%
Mercury Asset Management - small	207.0	6.1%	1.9%	1.1%
Miller, Anderson & Sherrerd - core	499.3	14.7%	4.5%	2.7%
J.P. Morgan Investment Management	280.5	8.3%	2.6%	1.5%
Pareto Partners	5.8	0.0%	0.0%	0.0%
Pictet International Management	251.1	7.4%	2.3%	1.4%
Record Treasury Management	7.7	0.0%	0.0%	0.0%
Scottish Widows Investment Mgmnt.	184.6	5.4%	1.7%	1.0%
Seligman Henderson Co. - small	189.3	5.6%	1.7%	1.0%
TCW Asset Management	137.0	4.0%	1.2%	0.7%
Templeton Investment Counsel - core	477.4	14.1%	4.3%	2.6%
Three International Liquidation Accounts	0.2	0.0%	0.0%	0.0%
International Active Stocks Total	$3,012.2	88.4%	27.3%	16.3%
International Stocks Total	$3,406.3	100.0%	30.9%	18.4%
Domestic and International Stocks	$10,990.6		100.0%	59.4%

Asset Allocation *as of December 31, 1996 (continued)*

Fixed Income	($ in millions) Market Value	% of Total Fixed Income	% of Total Fund
Passively Managed Core Portfolios			
Mellon Bond Associates	$566.0	12.9%	3.1%
Actively Managed Core Portfolios			
P. G. Corbin Asset Management	$9.6	0.2%	0.1%
Fischer Francis Trees & Watts (Int'l.)	433.4	9.9%	2.3%
Miller, Anderson & Sherrerd (Domestic)	760.2	17.3%	4.1%
Miller, Anderson & Sherrerd (Global)	776.9	17.7%	4.2%
J. P. Morgan Investment Management	524.5	11.9%	2.8%
Smith Graham & Co.	25.3	0.6%	0.1%
Active Core Fixed Income Port. Total	$2,529.9	57.6%	13.7%
Core Fixed Income Portfolios Total	$3,095.9	70.4%	16.7%
Actively Managed Specialty Portfolios			
CIGNA Investments	$0.9	0.0%	0.0%
John Hancock Mutual Life Ins. Co.	153.9	3.5%	0.8%
W. R. Huff Asset Management	725.0	16.5%	3.9%
Legg Mason Real Estate Advisors	410.6	9.3%	2.2%
Trust Company of the West - Funds II&III	9.5	0.2%	0.1%
Active Specialty Fixed Income Total	$1,299.9	29.6%	7.0%
Fixed Income Total	$4,395.7	100.0%	23.8%

Cash		% of Total Cash	
Payden & Rygel	$103.0	45.3%	0.6%
PA State Treasury (Separate Acct. + STIP)*	123.9	54.7%	0.7%
Cash Total	$226.9	100.0%	1.2%

Tactical Asset Allocation		Allocation (Stocks/Bonds/Cash)	
Barclays - Enhanced 70/30 U.S. TAA	$945.3	50%/50%/0%	5.1%

**Pennsylvania State Treasury Short Term Investment Pool (STIP) values are at cost. SERS investment advisors' cash is reflected within their own market values.*

The cash maintained at the Pennsylvania Treasury for SERS reflects the STIP and Separate Account values.

The total Pennsylvania Treasury STIP balance, including cash advisors (Pennsylvania Treasury Separate Account and Payden & Rygel), as well as cash held for SERS investment advisors = $470.9 million.

Asset Allocation charts continued on page 6

Asset Allocation *as of December 31, 1996* (continued)

Real Estate	($ in millions) Market Value	% of Total Real Estate	% of Total Fund
Separate Account Portfolios			
CRA Real Estate Securities	$98.3	7.0%	0.5%
Forest Investment Associates	70.1	5.0%	0.4%
Heitman/JMB	386.9	27.4%	2.1%
LaSalle Partners	54.3	3.8%	0.3%
Lowe Enterprises	184.5	13.0%	1.0%
Radnor Advisers	104.9	7.4%	0.6%
Separate Account Portfolios Total	$899.0	63.6%	4.9%
Pooled Fund Portfolios			
Aetna - 4 pooled funds	$87.7	6.2%	0.5%
Alex Brown	6.4	0.5%	0.0%
Copley CIIF-II	12.0	0.8%	0.1%
Corporate Property Investors	119.1	8.4%	0.6%
Goldman Sachs - Whitehall	53.6	3.8%	0.3%
John Hancock	10.9	0.8%	0.1%
Heitman - California Land Venture	1.3	0.1%	0.0%
JMB Group Trust III	37.7	2.7%	0.2%
Metric Apartment Fund - 2 pooled funds	44.2	3.1%	0.2%
Oxford Investment Partners	0.1	0.0%	0.0%
PSI III	19.1	1.4%	0.1%
Prudential - 2 pooled funds	0.1	0.0%	0.0%
Sentinel Corporation	41.6	2.9%	0.2%
TCW VI/OCM Opportunity Fund A & B	81.1	5.7%	0.4%
Pooled Fund Portfolios Total	$514.6	36.4%	2.8%
Real Estate Total	$1,413.6	100.0%	7.6%

Venture Capital		% of Total Venture Capital	
APA/Fostin - Fund I	$6.0	2.5%	0.0%
APA/Fostin - Fund II	33.6	13.8%	0.2%
Advent VII	33.9	14.0%	0.2%
Bachow III	11.4	4.7%	0.1%
CEO Venture Fund S & II	9.3	3.8%	0.1%
Edison Ventures III	19.4	8.0%	0.1%
Fairview Capital	3.2	1.3%	0.0%
Fostin Capital I & II	5.2	2.2%	0.0%
Grotech PA III & IV	19.0	7.8%	0.1%
Healthcare Ventures III	21.1	8.7%	0.1%
Keystone II & IV	10.3	4.3%	0.1%
NEPA Ventures I & II	7.7	3.2%	0.0%
New Enterprise Associates VI	25.1	10.3%	0.1%
PNC Venture Group I	1.8	0.7%	0.0%
Pittsburgh Seed Fund	0.9	0.4%	0.0%
Point Ventures	0.5	0.2%	0.0%
Polaris Ventures	3.3	1.4%	0.0%
Sprout Capital VII	8.4	3.5%	0.0%
Stock Distributions	0.0	0.0%	0.0%
Summit Ventures IV	14.6	6.0%	0.1%
TDH-II	2.8	1.2%	0.0%
Weston Presidio II	4.7	1.9%	0.0%
Zero Stage Capital II	0.6	0.2%	0.0%
Venture Capital Total	$242.7	100.0%	1.3%

Asset Allocation *as of December 31, 1996* (continued)

Alternative Investments	($ in millions) Market Value	% of Total Alter. Inv.	% of Total Fund
APAX Partners - 2 European funds	$12.1	4.0%	0.1%
Blackstone Capital II	30.1	9.9%	0.2%
Brentwood Associates Buyout Fund	14.9	4.9%	0.1%
Charterhouse Equity II	45.4	14.9%	0.2%
Clayton, Dubilier & Rice V	15.7	5.1%	0.1%
Code, Hennessy & Simmons I & II	23.4	7.7%	0.1%
Hellman & Friedman II & III	40.7	13.3%	0.2%
Kelso Investment V	31.4	10.3%	0.2%
Landmark Equity Partners IV & V	8.2	2.7%	0.0%
Madison Dearborn I	13.9	4.5%	0.1%
Murphy & Fauver	3.5	1.2%	0.0%
OCM - Opps. Fund & Principal Opps.	20.4	6.7%	0.1%
RR&Z PA Fund #1 & Private Equity Fund	1.6	0.5%	0.0%
Schroder Ventures UK III & IV	4.7	1.5%	0.0%
TCW Special Credits V	39.4	12.9%	0.2%
Alternative Investments Total	$305.4	100.0%	1.6%

Numbers may not add due to rounding.

SUMMARY *of* ASSET CLASSES

Summary of *DOMESTIC STOCK INVESTMENTS*

Domestic and international stocks comprise SERS's stock asset class, one of eight major asset classes used to diversify the investments of the fund. SERS's *Investment Plan* diversifies stock investments and balances stock management styles. SERS contracts with external investment advisors to manage portfolios.

Policy: Stock investments are employed by the fund primarily because their expected large return premiums versus inflation will, if realized, help preserve and enhance the real value of the fund over long periods of time. The stock asset class is to be managed on a total return basis.

Stock investments shall emphasize, but not be limited to, publicly traded securities that provide SERS with an equity interest in private sector concerns (e.g., common stock, preferred stock, convertible preferred stock, convertible bonds, etc.).

SERS's 1996 *Investment Plan* targeted an eventual allocation of 34.0% of assets to domestic stocks. It targeted the investment of 70.0% of domestic stocks in large capitalization stocks and 30.0% in medium/small capitalization stocks, and also provided for a balance in value and growth investment styles. The 1996 plan targeted 50.0% of domestic stocks to be indexed.

Market Value: Domestic stocks had a $7,584.3 million market value, 41.0% of the total fund's $18,520.3 million market value, on December 31, 1996.

Number of Investment Advisors: SERS had contracts with 17 external investment advisors to manage domestic stock portfolios.

Number of Investment Portfolios: SERS had 20 domestic stock portfolios managed by the 17 investment advisors.

Type of Investment Portfolios: As of December 31, 1996, 69.6% of SERS's domestic stock allocation was in large capitalization stock strategies, and 30.4% was in medium/small capitalization stock strategies. The portfolios within the domestic stock area can be classified by investment style: value at 18.4%; growth at 19.1%; and core at 62.6%. SERS had 18 actively managed portfolios (49.2% of domestic stocks) and two passively managed index portfolios (50.8% of domestic stocks). The active managers search out superior investment opportunities. The passively managed portfolios provide broad core diversification and are designed to provide market performance at a low cost.

Domestic **Stock Investment Advisor**	**Investment Style**	***Market Value of Portfolio as of December 31, 1996 ($ millions)**
1. Barclays Global Investors		
Equity Index Fund P (S&P 500)	large cap stocks – indexed core	$3,003.2
Extended Equity Market Fund (Wilshire 4500)	medium/small cap stocks – indexed core	844.0
2. Dietche & Field Advisors	small cap value stocks	71.3
3. Emerald Advisors	PA growth stocks	64.0
4. Fidelity Management Trust Company	S&P 500, risk controlled	116.3
5. Iridian Asset Management	medium cap value stocks	263.4
6. Loomis, Sayles & Company (D.C.)	large cap value stocks	117.6
7. Lord, Abbett & Co.	large cap value stocks	230.8
8. MacKay Shields Financial Corporation	large cap value stocks	122.2
9. Mellon Equity Associates		
PA Equity Portfolio	PA stocks	66.5
Special Equity	medium/small cap stocks	548.2
10. Miller, Anderson & Sherrerd	large cap growth stocks	456.0
11. J.P. Morgan Investment Management	S&P 500, risk controlled	124.4
12. Neuberger & Berman	small cap value stocks	70.8
13. Pilgrim, Baxter & Associates	medium cap growth stocks	278.3
14. Provident Investment Counsel (PIC)	large cap growth stocks	543.9
PIC Stellar Fund	small cap growth stocks	94.0
15. Sturdivant & Co.	large cap stocks	36.4
16. Trinity Investment Management	large cap value stocks	519.5
17. Zevenbergen Capital	large cap growth stocks	13.5
Total		$7,584.3

**Includes stocks and cash which the manager had available for investment. Numbers may not add due to rounding.*

Summary of
INTERNATIONAL STOCK INVESTMENTS

International and domestic stocks comprise the stock asset class, one of eight major asset classes SERS uses to diversify the investments of the fund. SERS's *Investment Plan* diversifies stock investments and balances stock management styles. SERS contracts with external investment advisors to manage portfolios.

Policy: Stock investments are employed by the fund primarily because their expected large return premiums versus inflation will, if realized, help preserve and enhance the real value of the fund over long periods of time. The stock asset class is to be managed on a total return basis.

SERS's long term investment objective in the international stock component of the stock asset class is to achieve a risk–adjusted total return, net of fees, that exceeds the total return of the SERS International Stock Custom Index.

SERS's 1996 *Investment Plan* targeted an eventual allocation of 20.0% of assets to international stocks. It targeted the investment of 80.0% of international stocks to large capitalization stock strategies and 20.0% to medium/small capitalization stock strategies.

Market Value: International stocks had a $3,406.3 million market value, 18.4% of the total fund's $18,520.3 million market value on December 31, 1996.

Number of Investment Advisors: SERS had contracts with 12 external investment advisors to manage international stock portfolios. In addition, SERS had contracts with two external advisors to manage a currency overlay program.

Number of Investment Portfolios: SERS had 13 stock portfolios managed by the 12 investment advisors in the international stock area and two portfolios for the currency overlay program.

Type of Investment Portfolios: As of December 31, 1996, 80.9% of SERS's international stock allocation was in large capitalization stock strategies and 19.1% was in medium/small capitalization stock strategies. SERS had 11 actively managed international portfolios and two index portfolios.

International Stock Investment Advisor	Investment Style	*Market Value of Portfolio as of December 31, 1996 ($ millions)
1. Barclays Global Investors		
Europe Funds	Europe stocks, index	$354.2
Australia and New Zealand Funds	Australia and New Zealand stocks, indexed	40.0
2. BEA Associates	international stocks – core	432.1
3. GAM International Management	Pacific Basin ex Japan stocks	157.0
4. Marathon Asset Management International	Europe stocks	183.2
5. Mercury Asset Management International	international medium/small cap stocks	207.0
6. Miller, Anderson & Sherrerd	international stocks – core	499.3
7. J.P. Morgan Investment Management	Japan stocks, risk controlled	280.5
8. Pareto Partners	currency hedging	5.8
9. Pictet International Management	75% international medium/small cap stocks / 25% emerging markets	251.1
10. Record Treasury Management	currency hedging	7.7
11. Scottish Widows Investment Management	Europe stocks	184.6
12. Seligman Henderson Co.	international medium/small cap stocks	189.3
13. TCW Asset Management	Asia ex Japan stocks	137.0
14. Templeton Investment Council	international stocks – core	477.4
15. Three liquidating accounts**		0.2
Total		$3,406.3

**Includes stocks and cash which the manager had available for investment. **Custodian bank accruals. Numbers may not add due to rounding.*

Summary of *FIXED INCOME INVESTMENTS*

Fixed income is one of eight major asset classes SERS uses to diversify the investments of the fund. SERS's *Investment Plan* diversifies fixed income investments and balances fixed income management styles. It is SERS's practice to contract with external investment advisors to manage portfolios.

Policy: Fixed income investments are employed by the fund primarily because of their ability to serve as a hedge against disinflation and/or deflation, their general ability to produce current income in the form of periodic interest payments, and because such investments help diversify the overall fund. The fixed income asset class is to be managed on a total return basis.

In the fixed income asset class, SERS's long term investment objective is to achieve a risk–adjusted total return, net of fees, that exceeds the total return of the SERS Fixed Income Custom Index.

SERS's 1996 *Investment Plan* targeted an eventual allocation of 23.0% of assets to the fixed income asset class. Of this amount, 75.0% was targeted to the core strategies and 25.0% to specialty strategies. The specialty strategies include whole–loan mortgages, high yield/special credits, and private placements.

Market Value: Fixed income had a $4,395.7 million market value, 23.8% of the total fund's $18,520.3 million market value, on December 31, 1996.

Number of Investment Advisors: SERS had contracts with 11 external investment advisors to manage portfolios within the fixed income asset class as of December 31, 1996.

Number of Investment Portfolios: SERS had a total of 13 portfolios within the fixed income asset class.

Type of Investment Portfolios: The fixed income asset class is divided into core and specialty segments. Core portfolios utilize a broad array of fixed income securities, while specialty portfolios focus on well–defined sectors and opportunistic strategies within the fixed income market.

Core: SERS had six actively managed core bond portfolios with a market value of $2,529.9 million and one passively managed core bond portfolio with a market value of $566.0 million. The combination of core portfolios represented 67.0% of the asset class. The core portfolio segment of the asset class includes exposure to both international and global fixed income.

Specialty: SERS had one whole–loan mortgage portfolio with a market value of $410.6 million, three high yield/special credits portfolios with a market value of $734.5 million, and two private placement portfolios with a market value of $154.7 million.

Fixed Income Investment Advisor	Investment Style	*Market Value of Portfolio as of December 31, 1996 ($ millions)
Core		
1. P.G. Corbin Asset Management	active domestic fixed income	$9.6
2. Fischer Francis Trees & Watts (Int'l.)	active international	433.4
3. Mellon Bond Associates	domestic – index	566.0
4. Miller, Anderson & Sherrerd	active domestic	760.2
	active global fixed income	776.9
5. J.P. Morgan Investment Management	active domestic fixed income	524.5
6. Smith Graham & Co.	active domestic fixed income	25.3
Specialty		
7. CIGNA Investments	PA private placements	0.9
8. John Hancock Mutual Life Insurance Company	private placements	153.9
9. W. R. Huff Asset Management	high yield bonds	725.0
10. Legg Mason Real Estate Advisors	residential and commercial mortgages	410.6
11. Trust Company of the West		
Special Credits Fund IIb	special credits	2.6
Special Credits Fund III	special credits	6.9
Total		**$4,395.7**

**Includes securities and cash that the manager had available for investment. Numbers may not add due to rounding.*

Summary of *CASH INVESTMENTS*

Cash is one of eight major asset classes SERS uses to diversify the investments of the fund. The SERS *Investment Plan* diversifies cash investments and balances cash management styles. It is SERS's practice to contract with external investment advisors to manage portfolios.

Policy: Cash Investments are employed by the fund to provide for SERS's liquidity needs and to accumulate funds for future permanent investment. The cash asset class is to be managed on a total return basis, with the exception that temporary investments may alternatively be evaluated on a yield–to–maturity basis given their extremely short maturities.

In the cash asset class, SERS's long term investment objective is to achieve a risk–adjusted total return, net of fees, that exceeds the total return on 91–day U.S. Treasury Bills. SERS's 1996 *Investment Plan* targeted an eventual allocation of 1.0% of assets to the cash asset class.

Market Value: Cash had a $226.9 million market value, 1.2% of the total fund's $18,520.3 million market value on December 31, 1996.

Number of Investment Advisors: SERS had a contract with one external investment advisor to manage a portfolio within the cash asset class. SERS also utilizes the Pennsylvania State Treasury Department to manage two cash accounts.

Number of Investment Portfolios: SERS had three portfolios within the cash asset class: one managed by the external advisor, and two managed by the State Treasury Department.

Type of Investment Portfolios: SERS had one actively managed short duration fixed income portfolio with a market value of $103.0 million; on a combined basis, the two portfolios managed by the State Treasury had a market value of $123.9 million. The State Treasury also manages excess cash balances held by other SERS investment advisors in other asset classes.

Cash Investment Advisor	Investment Style	Market Value of Portfolio as of December 31, 1996 ($ millions)*
1. Payden & Rygel	short duration fixed income	$103.0
2. PA State Treasury Department		123.9
a) Separate Account	short duration fixed income	
b) Short–Term Investment Pool	short term fixed income and money market instruments	
Total		**$226.9**

*In the aggregate, State Treasury managed $470.9 million on behalf of SERS and SERS's external investment advisors as of December 31, 1996. *Numbers may not add due to rounding.*

Summary of
TACTICAL ASSET ALLOCATION INVESTMENTS

Tactical asset allocation ("TAA") is one of eight major asset classes which SERS uses to diversify the investments of the fund. It is SERS's practice to contract with external investment advisors to manage portfolios.

Currently, the TAA asset class contains one investment strategy – the Enhanced U.S. 70/30 Tactical Asset Allocation Fund ("Enhanced 70/30 TAA"). The Enhanced 70/30 TAA strategy shifts assets among stocks, bonds and cash. SERS contracts with an external investment advisor, Barclays Global Investors ("Barclays"), to manage the portfolio.

Policy: SERS's 1996 *Investment Plan* targets an eventual allocation of 5.0% of assets to the TAA asset class.

Market Value: SERS's investment in the Barclays Enhanced 70/30 TAA Fund had a $945.3 million market value, 5.1% of SERS total fund's $18,520.3 million market value, on December 31, 1996.

Number of Investment Advisors: SERS had a contract with one external investment advisor to manage a TAA portfolio as of December 31, 1996.

Number of Investment Portfolios: SERS had one TAA portfolio managed by the one investment advisor.

Type of Investment Portfolio: The Barclays Enhanced 70/30 TAA Fund is designed to offer an efficient, low cost means of seeking above–market returns from a portfolio diversified among the domestic stock, fixed income, and cash markets.

The fund invests in three of Barclay's collective funds (Equity Index Fund, Long–Term Fixed Income Fund, and the Short–Term Asset Allocation Cash Fund). Proprietary technology is used to establish the optimal asset mix among these funds and adjust the mix of these funds. The mix will vary as economic and capital market conditions change. Under equilibrium conditions, the Enhanced 70/30 TAA Fund will have 70.0% of assets invested in the Equity Index Fund, 30.0% of assets invested in the Long–Term Fixed Income Fund, and 0.0% in the Cash Fund. As of December 31, 1996, the actual asset mix of the fund was 50.0% stock and 50.0% bonds.

Summary of *REAL ESTATE INVESTMENTS*

Equity real estate is one of eight major asset classes SERS uses to diversify the investment of the fund. SERS's *Investment Plan* diversifies real estate investments and balances real estate management styles. In accordance with the plan, SERS contracts with external investment advisors to manage portfolios.

Policy: Equity real estate investments are generally long–term, illiquid investments that, due to their high correlation with inflation, provide an inflation hedge and diversification within the total portfolio due to their low correlation with stocks and bonds. It is expected that the long–term total return (income and appreciation) for real estate will fall between those of stocks and bonds. The equity real estate asset class is to be managed on a total return basis.

In the equity real estate asset class, SERS's long term investment objective is to achieve a risk–adjusted total return, net of fees, that exceeds the total return of the NCREIF Index. SERS's 1996 *Investment Plan* targeted an eventual allocation of 10.0% of assets to the equity real estate asset class.

Investments are made through commingled fund investments, limited partnerships and separate account portfolios where SERS invests in the properties through real estate title holding companies or with other co–investors. SERS's equity real estate portfolio guidelines provide for diversification by:

- Transaction structures;
- Property types;
- Geographic location; and
- Development phase.

Market Value: Real estate had a $1,413.6 million market value, approximately 7.6% of the total fund's market value, on December 31, 1996.

Number of Investment Advisors: SERS had contracts with 15 external investment advisors to manage real estate portfolios as of December 31, 1996.

Number of Investment Portfolios: SERS had investments in 25 real estate portfolios managed by the 15 investment advisors.

Type of Investment Portfolios: As of December 31, 1996, the composition of the real estate portfolio was:

- 85% equity ownership, 15% equity–oriented mortgages;
- 36% pooled funds, 64% separate accounts;
- 25% office, 7% industrial, 32% retail, 20% residential, 9% hotel/motel, 7% other;
- 18% Pennsylvania, 25% East excl. PA, 20% West, 20% South, 17% Midwest; and
- 24% of the market value of the separate accounts was invested in 16 properties located in Pennsylvania.

Real Estate **Investment Advisor**	**SERS Initial Funding**	**Property Type**	**Transaction Structure**	***Market Value of Portfolio as of December 31, 1996 ($ millions)**
1. Aetna				
CERESA I	06/30/83	office, industrial	equity ownership	$2.4
PMSA	09/30/83	diversified	equity mortgages	43.5
RESA	06/30/84	diversified	equity ownership	34.4
Apartment Fund	12/31/86	apartments	equity ownership	7.3
2. Copley CIIF-II	08/08/88	industrial, other	equity ownership	12.0
3. Corporate Property Investors	12/08/83	retail malls	equity ownership	119.1
4. Forest Investment Assoc	10/30/92	timber	equity ownership	70.1
5. Heitman/JMB				
Separate account	12/28/87	office, industrial, retail, apartments	equity ownership	386.9
California Land Venture	12/07/89	land	equity ownership	1.3
JMB Group Trust III	12/31/84	office, retail	equity ownership	37.7
6. John Hancock Apart. Fund	09/30/86	apartments	equity ownership	10.9
7. LaSalle Separate Account	10/1/93	diversified	equity ownership	54.3
Alex Brown Profile Fund	12/31/84	office, industrial, retail	equity ownership	6.4
8. Lowe Enterprises	10/1/93	office, hotels	equity ownership	184.5
9. Metric				
MIAF	09/05/89	apartments	equity ownership	24.2
MIAF II	12/07/92	apartments	equity ownership	20.0
10. OCM Opportunity Fund	05/09/96	opportunistic	equity and debt	20.5
11. PSI III	08/16/88	industrial	equity ownership	19.1
12. Radnor Advisers	10/1/93	PA office, industrial, retail, apartments	equity ownership	104.9
CRA Securities	01/31/96	diversified REITs	equity ownership	98.3
13. Sentinel Corporation	07/31/84	office, industrial retail, residential	equity ownership	41.6
14. TCW Fund VI	04/20/94	opportunistic	equity and debt	60.6
15. Whitehall V & VI	04/20/94	opportunistic	equity and debt	37.7
Whitehall V-S & VI-S	12/11/95	opportunistic	equity and debt	5.0
Whitehall VII & VIII	05/28/96	opportunistic	equity and debt	11.0
Total				**$1,413.6**

**Numbers may not add due to rounding.*

Summary of *VENTURE CAPITAL INVESTMENTS*

Venture capital is one of eight major asset classes SERS uses to diversify the investments of the fund. Venture capital is the financing of young, relatively small, rapidly growing companies that do not have access to public equity or debt–oriented institutional funding. SERS invests capital as a limited partner in venture capital limited partnerships, which are established for the purpose of investing in and managing venture capital companies.

Policy: In the venture capital asset class, SERS's long term investment objective is to achieve a risk–adjusted total return, net of fees, that exceeds either the Venture Economics' relevant Vintage Year Median Returns or relevant return data furnished for benchmark purposes by SERS's venture capital consultant. SERS's 1996 *Investment Plan* targeted an eventual allocation of 2.0% of assets to the venture capital asset class.

History: Act 95, Section 4, became effective on June 29, 1984, specifying that SERS may invest up to 1.0% of the fund's assets in venture capital by acquiring equity or debt and equity interests in a business that is expected to grow substantially in the future. Act 1991–23 became effective in 1991 and specified that SERS may invest up to 2.0% of the fund in venture capital. Furthermore, Act 1994–29 became effective in 1994, enabling SERS to invest according to "Prudent Person" standards, and further specifying that an investment in venture capital by SERS may be made only if the investment is reasonably likely to enhance the general welfare of the Commonwealth and its citizens.

Market Value: SERS's venture capital investments had a $242.7 million market value, 1.3% of the total fund's $18,520.3 million market value, on December 31, 1996. In addition, SERS had $290.8 million in outstanding obligations to fund venture capital partnerships, representing 1.7% of SERS's total fund at December 31, 1996.

Number of Limited Partnerships: SERS has made commitments to 31 venture capital limited partnerships. As of December 31, 1996, SERS had paid–in capital as a limited partner in 27 of those partnerships. Paid–in capital represents funds that have been drawn down by the venture capitalist and are readily available for investment.

SERS Venture Capital Program: SERS venture capital program includes commitments to 31 venture capital limited partnerships. These partnerships are committed to include Pennsylvania–based companies as a part of their venture investment focus. The intent of these partnerships as a part of the overall venture program is to make venture capital investments in companies either headquartered in Pennsylvania or in companies that provide employment for Pennsylvania citizens. There is growing evidence that this strategy is bearing fruit. For 1994, Pennsylvania ranked among the top 10 states in the U.S. in venture capital dollars invested. In 1995, Pennsylvania was tied with North Carolina for sixth on this list with $110 million dollars invested, up from $77 million the previous year. In addition, Pennsylvania–based managers ranked eleventh in capital commitments during 1995.

A major component of the venture program is to diversify company investments across industries. As of December 31, 1996, the venture capital program was well diversified across various industry categories:

27%	computer related industries	19%	healthcare related industries	9%	biotechnology
12%	telecommunications	4%	financial services	9%	consumer products
4%	industrial products	3%	electronic products	1%	restaurants
2%	retailing	2%	media services	8%	others

The venture program's financing stage focus varies among the 31 partnerships. The venture partnerships focus on specific phases in company life cycles. SERS's investments are thereby grouped to reflect this exposure and are labeled as follows: later stage, middle stage, early stage and seed stage financing.

VENTURE CAPITAL Committed, Drawn & Distributed

at December 31, 1996

In the chart below, Capital Committed represents SERS's capital committed to each venture capital limited partnership. Capital Drawn is that portion of SERS's capital commitments that was drawn or taken down by the venture capitalist and is readily available for investment. Market Value of Distributions shows the value of the profits distributed from each limited partnership to SERS.

Venture Capital Limited Partnership	Financing Stage Focus	SERS Initial Funding	Capital Committed ($ millions)	Capital Drawn ($ millions)	Distributions ($ millions)
1. APA/Fostin	diversified	9/30/87	$20.0	$20.0	$49.0
2. Advent VII	diversified	7/30/93	25.0	20.0	11.0
3. Advent VIII	diversified	*	30.0	-	-
4. Bachow III	diversified	11/9/94	25.0	11.0	-
5. CEO Ventures S	diversified	7/29/87	1.0	1.0	1.0
6. CEO Ventures II	diversified	7/14/89	8.0	7.0	2.0
7. Edison Ventures III	diversified	3/1/94	25.0	18.0	-
8. Fairview Capital	minority	9/28/94	10.0	3.0	-
9. Fostin Capital	diversified	11/25/85	10.0	10.0	5.0
10. Fostin Capital II	diversified	10/5/89	8.0	8.0	2.0
11. Grotech PA III	diversified	6/29/90	3.0	3.0	-
12. Grotech IV	diversified	11/1/93	25.0	16.0	-
13. Healthcare Ventures III	diversified	7/9/92	15.0	15.0	12.0
14. Keystone II	middle/later	11/25/85	10.0	10.0	21.0
15. Keystone IV	middle/later	7/21/93	15.0	10.0	5.0
16. NEPA Ventures	seed/early	8/29/85	2.0	2.0	5.0
17. NEPA Ventures II	seed/early	7/24/92	8.0	6.0	-
18. NEPA Ventures III	seed/early	**	15.0	-	-
19. New Enterprise Assoc. VI	early/later	3/2/94	25.0	20.0	5.0
20. New Enterprise Assoc.	early/later	**	30.0	-	-
21. P/A Fund II	diversified	6/2/93	30.0	24.0	5.0
22. P/A Fund III	diversified	**	100.0	-	-
23. PNC Ventures	diversified	11/25/85	5.0	5.0	9.0
24. Pittsburgh Seed	seed	1/13/87	2.0	2.0	1.0
25. Point Ventures	diversified	10/2/90	1.0	1.0	-
26. Polaris Ventures	early stage	6/4/96	15.0	3.0	-
27. Sprout Capital VII	diversified	2/24/95	18.0	7.0	-
28. Summit Ventures IV	later stage	6/27/95	25.0	9.0	-
29. TDH II	diversified	11/25/85	9.0	9.0	13.0
30. Weston Presidio II	diversified	11/27/95	20.0	4.0	-
31. Zero Stage Capital II	seed	4/30/87	2.0	2.0	-
Total			$537.0	$246.0	$146.0

**Contract executed but not funded. **No contract to date.*

Summary of *ALTERNATIVE INVESTMENTS*

Alternative investments is one of eight major asset classes SERS uses to diversify the investments of the fund. The alternative investment program has commitments to 19 leveraged buyout partnership investments, four European venture capital/private equity partnership investments, two distressed debt investment funds, and two partnerships which invest in secondary interests.

Leveraged buyouts (LBO's) acquire companies using borrowed funds. Typically, assets of the target company serve as collateral for loans originated by the acquirer. The acquirer repays the loans from the acquired company's cash flows. SERS invests as a limited partner in LBO partnerships formed for the purpose of providing funds, usually in the form of equity interests, for the acquisition of companies.

Special situations/restructuring investments operate under a philosophy of flexibility to adapt to market fluctuations and opportunities that exist from the deleveraging of debt–laden companies. Investments are usually made in successful companies, which carry high debt levels and seek to deleverage for a variety of reasons. Deleveraging is often used in an attempt to avoid a major restructuring or bankruptcy. Investments are usually "white squire" or friendly "influence block" in nature. A "white squire" invests in companies that could benefit from the capital and presence of a large and supportive shareholder.

Investing in the secondary partnership market involves acquiring interests in established buyout and private equity funds by purchasing existing limited partnership positions opportunistically and at discounts from their net asset values. Secondary transactions, by virtue of investment timing, reap the benefit of reduced risk for the asset class, without a reduction in the return.

SERS is also a limited partner in four European–based venture capital limited partnerships focused on private equity investing in France, Germany, and the United Kingdom (U.K.). Unlike venture capital investing in the U.S., venture investing within Europe is more like private equity in nature, tending to occur at a much later stage and concentrating on lower technology industries.

Policy: In the alternative investments asset class, SERS's long term investment objective is to achieve a risk–adjusted total return, net of fees, that exceeds either market returns for similar types of alternative investments or relevant return data furnished for benchmark purposes by SERS's alternative investments consultant. The 1996 *Investment Plan* targeted an eventual allocation of 5.0% to the alternative investments asset class.

Market Value: SERS's alternative investments program had a $305.4 million market value, or 1.6% of the total fund's $18,520.3 million market value, on December 31, 1996. In total, SERS had committed to invest $700 million in the alternative investments asset class.

Number of Limited Partnerships: SERS has made commitments to 27 alternative investment limited partnerships. As of December 31, 1996, SERS had paid in capital as a limited partner in all but five of the limited partnerships. Paid–in capital represents funds that have been drawn down by the alternative investment advisors and are readily available for investment.

Alternative Investments Program: The alternative investments program has commitments to 19 buyout oriented partnerships well diversified by size of investment and geographic focus. Only "friendly" acquisitions are pursued. All deals are non–hostile and privately negotiated. Most are non–auction and completed with present management in place. SERS's four non–U.S. venture capital investments are comprised of private equity investments in companies based in the U.K. and Europe. The four partnerships focus on the U.K., France, Germany, and German–speaking countries. All four funds plan to take advantage of changes occurring within Europe, including the elimination of trade barriers in the European Economic Community, the reunification of Germany,

and the disintegration of the former Soviet Union. European venture capital investing focuses on small, rapidly growing companies that do not have access to traditional sources of capital.

SERS has ownership interest in two partnerships specializing in distressed debt instruments. One of the partnerships deals in debt obligations of financially troubled companies; the distressed debt is ultimately converted into equity in order to produce an equity oriented return. The partnership is national in focus. Similarly, the other investment, also in distressed debt, anticipates gains in the appreciation of the debt instrument itself and does not rely on converting the debt into an equity position. SERS also owns two partnerships that invest in secondary purchases. The partnerships have a national focus and specialize in secondary purchases of established buyout and venture capital holdings. The benefits of secondary purchases are that they: 1) enable the limited partners, who are selling for non–economic reasons, to gain liquidity in an otherwise illiquid investment; 2) can usually be acquired from motivated sellers at a substantial discount to net asset value; and 3) often provide early distribution of profits versus initial investments in a new fund.

ALTERNATIVE INVESTMENTS Committed, Drawn & Distributed

at December 31, 1996

In the chart below, Capital Committed represents SERS's capital committed to each limited partnership. Capital Drawn is that portion of SERS's capital commitments that was drawn or taken down by the general partner and is readily available for investment. The market value of Distributions shows the value of the profits distributed from each limited partnership to SERS.

Alternative Investments Limited Partnership	Financing Stage Focus	SERS Initial Funding	Capital Committed ($ millions)	Capital Drawn ($ millions)	Distribution ($ millions)
1. APAX Capital Risque III	France	11/29/90	$5.0	$5.0	$1.0
2. APAX German Ventures	Germany	1/30/91	5.0	5.0	2.0
3. Blackstone Capital II	global buyouts	8/26/94	40.0	20.0	17.0
4. Brentwood Buyout Fund	national buyouts	11/21/88	10.0	12.0	4.0
5. Charterhouse Equity II	national buyouts	3/30/94	40.0	27.0	8.0
6. Clayton, Dubilier & Rice V	global buyouts	5/3/95	50.0	9.0	-
7. Code, Hennessy & Simmons	Midwest buyouts	9/28/89	10.0	9.0	13.0
8. Code, Hennessy & Simmons	Midwest buyouts	7/12/94	20.0	10.0	-
9. DLJ Merchant Banking Fund	global buyouts	*	75.0	-	-
10. Frontenac VII	Midwest	**	40.0	-	-
11. GTC&R V	national buyouts	*	11.0	-	-
12. Hellman & Friedman II	global situations	1/7/92	25.0	24.0	7.0
13. Hellman & Friedman III	global situations	6/14/95	50.0	16.0	-
14. Kelso Investment V	national buyouts	1/26/94	40.0	30.0	9.0
15. Landmark Equity Partners IV	secondaries	2/28/95	31.0	8.0	3.0
16. Landmark Equity Partners V	secondaries	1/27/96	24.0	3.0	2.0
17. Madison Dearborn I	national buyouts	2/23/93	15.0	11.0	8.0
18. Madison Dearborn II	national buyouts	**	40.0	-	-
19. Murphy & Fauver	national buyouts	10/11/88	5.0	5.0	3.0
20. OCM Opportunities Fund	distressed debt	1/12/96	24.0	14.0	-
21. OCM Principal Opportunities	private equity	11/12/96	25.0	2.5	-
22. RR&Z PA Fund I	PA buyouts	3/2/88	10.0	10.0	19.0
23. RR& Private Equity Fund	PA buyouts	11/7/96	20.0	0.2	-
24. Schroder Ventures UK III	UK	8/29/89	10.0	9.0	12.0
25. Schroder Ventures UK IV	UK	4/2/96	15.0	1.6	-
26. TCW Special Credits V	national situations	8/25/94	35.0	33.0	-
27. Vestar Capital Partners	national situations	*	25.0	-	-
Total			$700.0	$264.3	$108.0

**Contract executed but not funded. **No contract to date*

Section 2

PENNSYLVANIA INVESTMENTS

Summary of *PENNSYLVANIA INVESTMENTS*

Members of the SERS Board, employes of SERS and agents of the Board stand in a fiduciary relationship to the members of SERS regarding the investments and disbursements of the fund. Subject to restrictions on investments contained in the Retirement Code and the Fiscal Code, the Board has exclusive control and management of the fund and full power to invest the assets of the fund. The Board adopted a formal Statement of Investment Policy in 1979 that has been revised to reflect and incorporate subsequent legislative changes governing investments. Where investment characteristics including yield, risk and liquidity are equivalent, the Board's policy favors investments that have a positive impact on the economy of Pennsylvania.

SERS's investment portfolios have always had substantial investments in Pennsylvania firms, as some large national firms are headquartered in the Pittsburgh, Philadelphia, and Harrisburg areas, including Bell Atlantic, Rite Aid, Westinghouse, Sun, Rohm & Haas, and H. J. Heinz. In addition, SERS has invested in portfolios designed to emphasize investments in Pennsylvania. As of December 31, 1996, SERS had $1,270.7 million, or approximately 6.8% of SERS's total fund, invested in Pennsylvania. Of this amount, SERS had placed $910.1 million in portfolios specially designed for Pennsylvania investments.

STOCKS

SERS has two Pennsylvania stock portfolios that increase exposure to "in-state" corporations. SERS's Pennsylvania stock universe is comprised of 561 publicly-traded corporations that: 1) name their headquarters as Pennsylvania and have Pennsylvania employes or operations; or 2) have Pennsylvania-based employment exceeding 25% of total corporate employment. Emerald Advisers, Inc., of Lancaster and Mellon Equity Associates of Pittsburgh actively manage portfolios for SERS from SERS's Pennsylvania stock universe. The market value of SERS's Pennsylvania stock portfolios was $130.5 million as of December 31, 1996.

In addition to the Pennsylvania equity portfolios, SERS also had $276.7 million invested in the stock of Pennsylvania companies as of December 31, 1996. These stocks were held in SERS's index funds and in SERS's actively managed portfolios.

FIXED INCOME

At the December 11, 1996, Board meeting, the Board approved funding of a new program called the Pennsylvania Capital Fund. This program will be managed by CoreStates Enterprise Capital Group and will provide debt financing to support the expansion and growth of Pennsylvania small business. The Board authorized a $75.0 million allocation for this program. Funding is scheduled to occur during the second quarter of 1997.

As of December 31, 1996, SERS had $0.8 million invested in loans of the Pennsylvania Private Placement Separate Account designed by the Pennsylvania MILRITE Council and managed by Cigna. This account was created to provide long-term, fixed rate loans to established Pennsylvania firms that do not have access to the public bond markets.

SERS had $163.7 million invested in Pennsylvania mortgages ($162.9 million in conventional commercial and $0.8 million in residential properties) as of December 31, 1996. The residential segment of this portfolio is comprised of competitive rate mortgages distributed solely throughout Pennsylvania, in accordance with SERS policy to originate 100% of all residential mortgages within the Commonwealth. The commercial segment listed above is comprised of competitive rate mortgages on various industrial, retail, apartment, and office complexes within Pennsylvania. Legg Mason, SERS's mortgage advisor, has committed on a best efforts basis under its fiduciary responsibility to invest between 15.0% and 30.0% of SERS's commercial mortgage portfolio in Pennsylvania and 100% of all residential mortgages in Pennsylvania. It is conservatively estimated

that as of December 31, 1996, the various commercial projects financed within the Commonwealth by SERS under the commercial mortgage program directly employed over 5,000 workers. This figure does not take into account those employed in the property management and maintenance areas of these projects, nor does it consider the favorable "ripple effect" such jobs may have on the local economy.

Additionally, SERS had approximately $47.4 million invested as of December 31, 1996, in corporate securities issued by Pennsylvania–based companies. These securities are held in SERS's various externally managed bond portfolios.

CASH

SERS is one of the largest investors in the Short Term Investment Pool managed by the Pennsylvania State Treasury Department. The Treasury Investment Pool had significant holdings of: 1) certificates of deposit issued by Pennsylvania–based financial institutions; 2) short–term notes and commercial paper issued by Pennsylvania–based companies; 3) notes and obligations of selected Pennsylvania state agencies; and 4) FNMA mortgage–backed securities backed by loans issued under the Homestart program. The Homestart program is designed to encourage home ownership in the Commonwealth by making mortgages available to lower, moderate, and middle–income Pennsylvania households.

REAL ESTATE

In 1987, SERS began investing directly in the Pennsylvania commercial real estate market and subsequently established two separate account real estate portfolios managed by Heitman Capital Management and RAI Advisors, Inc., which have a Pennsylvania focus. The Heitman separate account had a requirement to invest on a best efforts basis 50.0% of its initial allocation within the Commonwealth, while the RAI account is focused exclusively on investing within the state.

As of December 31, 1996, the SERS real estate portfolio contained 27 Pennsylvania properties totaling 6,216,108 square feet ("s.f.") of office, retail, hotel, apartment, and warehouse space. The gross market value of these investments totaled $476.3 million, of which SERS's ownership share was $223.3 million.

VENTURE CAPITAL

The SERS venture capital program has committed $537 million to 31 venture capital partnership funds. As a part of its focus, the program targets partnerships that can demonstrate the ability to make investments in companies either based in Pennsylvania or in companies that employ Pennsylvania citizens. These partnerships are diversified among various geographic regions and financing stages, including four seed funds designated by the Commonwealth's Ben Franklin Partnership.

SERS, in conjunction with the Pennsylvania Public School Employes' Retirement System (PSERS), created the APA/Fostin Pennsylvania Venture Capital Fund in 1987 with a commitment of $20 million from each fund. The partnership of Alan Patricof Associates/Adams Capital manages this venture capital fund with offices in Philadelphia and Pittsburgh. During 1992, SERS and PSERS committed $30 million each to create the P/A Fund (formerly known as the APA/Fostin Pennsylvania Venture Capital Fund II). In addition, during the fourth quarter of 1996, SERS committed $100 million to P/A Fund III. In keeping with established precedent, the P/A Funds will continue to focus on Pennsylvania venture capital investing.

A key aspect of SERS's venture capital program is the attraction of national funds into Pennsylvania investments. Alan Patricof Associates' expertise as the lead investor in the majority of their investments continues to provide Pennsylvania with a flow of venture capital money from numerous out–of–state funds and investors. The progress of Pennsylvania within the national

venture capital community should reap substantial rewards in future years for both Pennsylvania and the SERS Fund. As of June 30 1996, SERS's venture capital partnerships have attracted over $340 million of out-of-state funds to finance their active venture companies based in Pennsylvania.

The SERS venture program, after more than 10 years of venture investing, continues to enhance the pool of venture capital available to Pennsylvania-based companies by attracting larger national venture capital funds into the state. The committed capital and managerial talent of these organizations could substantially increase business creation and job opportunities throughout Pennsylvania. These national firms also bring investment capital reserves to Pennsylvania and provide a significant opportunity for SERS to leverage its venture capital dollars while promoting economic growth.

SERS has been active in seed and early-stage financings of Pennsylvania-based companies. SERS's investment in the NEPA Venture Fund has, during its 11-year history, provided investments in 26 Pennsylvania-based startup companies that possess a technology orientation. SERS's commitment to NEPA Venture Fund II enabled NEPA to cover the Pittsburgh area in addition to Eastern Pennsylvania. The goal of NEPA Venture Fund III, the most recent fund, will be to invest in early stage companies across Pennsylvania and surrounding regions.

The limited partnerships funded by SERS have made investments in 63 Pennsylvania companies currently active within their portfolio as of December 31, 1996. The Pennsylvania portfolio companies plus non-Pennsylvania-based companies currently active in SERS's portfolio, employ approximately 3,300 Pennsylvanians and had an estimated 1996 payroll of approximately $129 million. As of December 31, 1996, $246.0 million of the $537.0 million committed to venture capital partnership funds had been drawn down for investment by the partnerships, and $146.0 million had been returned to SERS.

ALTERNATIVE INVESTMENTS

In 1988, SERS invested $10 million with RR&Z Pennsylvania Fund #1, a Pittsburgh-based buyout group that invested in non-hostile, "friendly," privately negotiated, non-auction deals that are completed with present management in place. The LBO fund focuses on small-to-medium capitalization companies (between $5 and $100 million) within a 600 mile radius of Western Pennsylvania. Since inception, RR&Z has returned over $19 million to SERS and has successfully exited four of its five investments. Based on RR&Z's performance, SERS committed $20 million in 1996 to the RR&Z Private Equity Fund, which will be a continuation of the strategy developed in Pennsylvania Fund #1.

SERS's search for fund managers within alternative investments includes a focus on Pennsylvania-based companies. SERS's commitments to this asset class include Charterhouse Equity Partners and Kelso Investment Associates, which have made Pennsylvania a part of their focus by investing in Pennsylvania-based companies.

Section 3

INVESTMENT *and* PROGRAM TRENDS

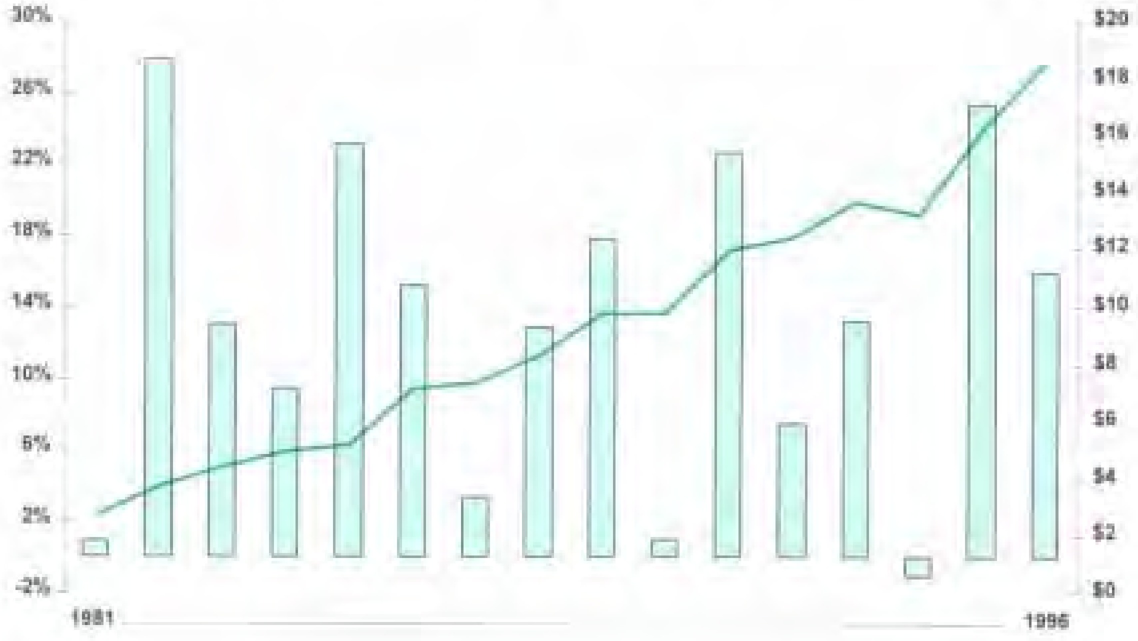
Investment Related *STATISTICS*

1981 through 1996

Year End	*Market Value	# of Investment Advisors	# of Portfolios	# of Consultants	Annual Total Fund Rate of Return (*net of fees*)
1981	$2,684,000,000	5	6	3	0.9%
1982	$3,730,000,000	6	7	4	27.8%
1983	$4,396,000,000	14	17	4	13.0%
1984	$4,922,000,000	22	24	4	9.4%
1985	$5,157,000,000	23	26	3	23.1%
1986	$7,120,000,000	30	34	3	15.2%
1987	$7,367,000,000	37	42	3	3.3%
1988	$8,312,000,000	41	49	3	12.8%
1989	$9,758,000,000	47	59	4	17.8%
1990	$9,773,000,000	53	65	4	1.0%
1991	$11,940,000,000	56	68	4	22.6%
1992	$12,407,000,000	66	79	4	7.4%
1993	$13,650,000,000	61	80	4	13.2%
1994	$13,223,000,000	78	100	4	- 1.1%
1995	$16,185,000,000	84	108	4	25.3%
1996	$18,520,000,000	96	126	4	15.9%

**Unaudited*

In the chart below, bars represent the SERS Fund's annual rate of return (net of fees) in each year and the solid line represents overall fund growth during the period 1981 through 1996



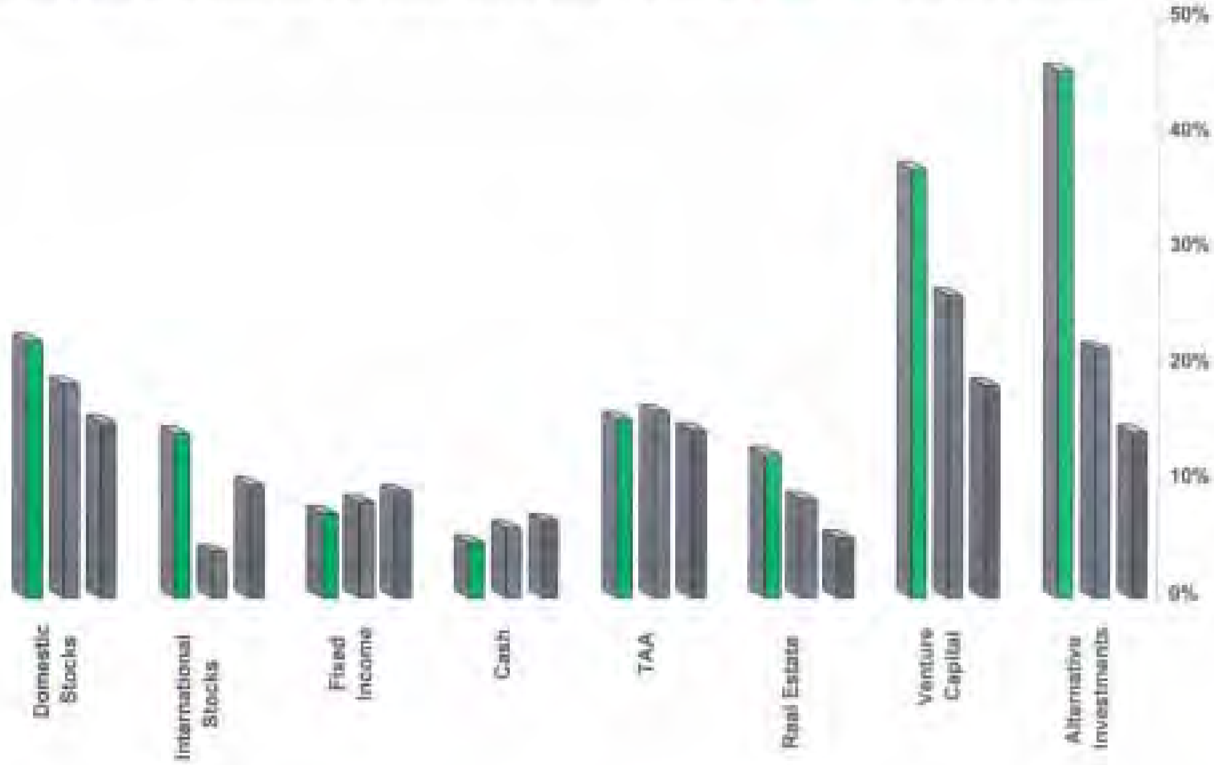
Investment Performance *by ASSET CLASS*

Calendar Year Basis through December 31, 1996 (net of fees)*

Asset Class	One-Year Total Return	Three-Year Total Return	Five-Year Total Return	10-year Total Return
Domestic Stocks	22.0%	18.3%	15.0%	14.6%
International Stocks	14.0%	3.9%	9.6%	N/A
Fixed Income	7.1%	8.1%	9.0%	9.5%
Cash	4.6%	5.9%	6.5%	7.7%
Tactical Asset Allocation	15.3%	15.9%	14.3%	N/A
Real Estate	12.2%	8.4%	5.1%	3.9%
Venture Capital	36.9%	26.0%	18.2%	10.8%
Alternative Investments	45.5%	21.4%	14.2%	N/A
Total Fund	15.9%	12.8%	11.8%	11.5%

**Returns for periods longer than one year are annualized.*

SERS Fund asset class rates of return (net of fees) over the past one, three and five calendar years



Prudent *PERSON*

The SERS Board's investment authority is governed by the "prudent person" standard as set forth in Title 71, Pennsylvania Consolidated Statutes, Section 5931(a). Enactment of the prudent person standard in Act 1994-29 and a subsequent asset/liability study completed by RogersCasey and the SERS Investment Office staff are the foundation of SERS's *Annual Five Year Investment Plan*. With prudent person investment authority, SERS is able to pursue a broader array of investment opportunities that enhance the ability to achieve competitive rates of return while maintaining risk at acceptable levels. Studies undertaken by SERS have demonstrated that the prudent application of this expanded investment authority will result in a more efficient portfolio that better serves the needs of SERS.

Projected Asset Allocation *1997 through 2001*

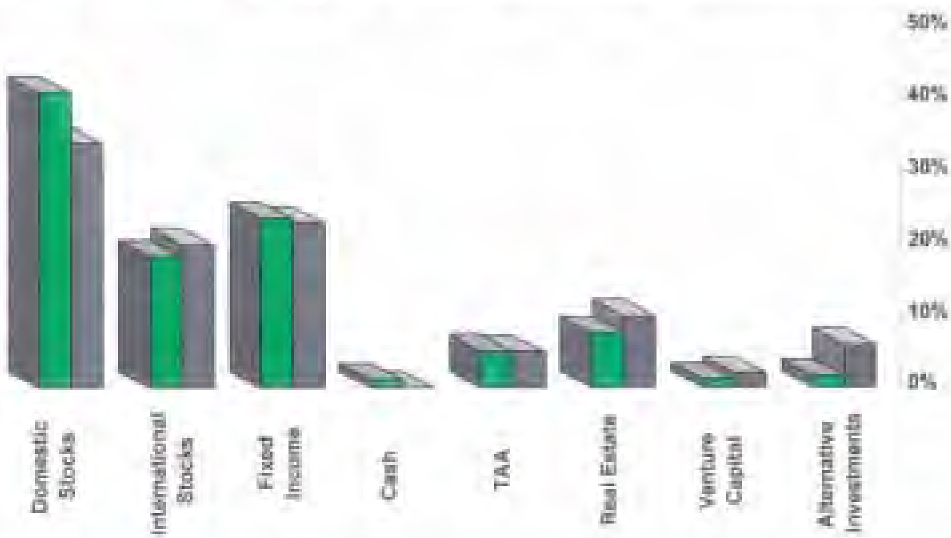
SERS's annual *Investment Plan* covers a period of five years. The fund's asset allocation strategy evolves during this timeframe to achieve the long-term targets for each asset category. The planned evolution of the asset allocation strategy is reflected in the table below.

*Asset Allocation Trend**

1996 Actual		Targeted: 1997	1998	1999	2000	2001
41.0%	Domestic Stocks	38.0%	37.5%	36.7%	35.4%	34.0%
18.4%	International Stocks	20.0%	20.0%	20.0%	20.0%	20.0%
23.8%	Fixed Income	23.5%	23.2%	23.0%	23.0%	23.0%
1.2%	Cash	0.0%	0.0%	0.0%	0.0%	0.0%
5.1%	Tactical Asset Allocation**	5.0%	5.0%	5.0%	5.0%	5.0%
7.6%	Real Estate	10.0%	10.0%	10.0%	10.0%	10.0%
1.3%	Venture Capital	1.3%	1.3%	1.5%	1.8%	2.0%
1.6%	Alternative Investments	2.2%	3.0%	3.8%	4.8%	6.0%
100.0%		100.0%	100.0%	100.0%	100.0%	100.0%

**Source: SERS's 1996 Annual Five Year Investment Plan.* ***TAA normal position is 70% stocks and 30% bonds. Numbers may not add due to rounding.*

Comparison of asset allocations: actual as of December 31, 1996, and projected at December 31, 2001



Commissions Paid by SEPARATE ACCOUNT STOCK ADVISORS to CLEARING BROKERS IN 1996

BROKER	COMMISSIONS	BROKER	COMMISSIONS
MERRILL LYNCH	$1,373,720.24	CIMB SEC SDN BHD K L	$56,176.80
GOLDMAN SACHS	734,032.14	UNION BANK OF SWITZERLAND	53,209.11
WARBURG SECURITIES	609,739.63	CARNEGIE INC	51,815.40
UBS LIMITED	547,188.97	PCS SECURITIES	51,484.00
DAIWA	507,283.66	PRUDENTIAL SECURITIES	50,897.92
CREDIT LYONNAIS	437,025.05	OPPENHEIMER + COMPANY	50,849.31
HG ASIA SECURITIES	415,739.90	TIR SECURITIES LTD	50,233.80
CS FIRST BOSTON CORPORATION	413,995.17	GARANTIA INVESTMENTS	48,034.13
BEAR STEARNS	409,897.94	SSANGYONG INVEST + SECURITIES	44,930.46
INSTINET	399,733.31	FOX PITT KELTON INC	44,373.78
MORGAN STANLEY AND COMPANY	375,400.93	EWING CAPITAL INC	44,103.90
JAMES CAPEL	373,236.71	BERNSTEIN	43,554.80
LYNCH JONES AND RYAN	360,227.62	SCOTIA MCLEOD	41,704.37
W.I. CARR	333,286.22	RBC DOMINION SECURITIES	38,759.00
BARING SECURITIES	316,416.63	BAIN SECURITIES, INC	38,635.13
JARDINE FLEMING	306,148.19	ING BARING SECURITIES	37,920.05
KLEINWORT BENSON INVESTMENT MGMNT	299,394.94	MICHAUX LYON	37,292.57
DONALDSON LUFKIN & JENRETTE SECURITIES	257,371.89	PHILEO ALLIED SECURITIES	36,399.81
LEHMAN BROTHERS INC	219,480.97	BANCO DE SANTANDER	35,786.43
ROBERTSON STEPHENS	214,025.84	HARGREAVE HALE	35,770.72
INVESTMENT TECHNOLOGIES	196,833.21	SBC CAPITAL MARKETS	35,512.17
CROSBY SECURITIES COMPANY	194,801.87	ORD MINNETT	34,232.63
NOMURA SECURITIES COMPANY	191,098.05	ROCHDALE SECURITIES CORP	33,655.00
SMITH BARNEY	165,890.70	BRIDGE TRADING COMPANY	31,942.44
ASIA EQUITY LTD	150,841.88	JANNEY MONTGOMERY SECURITIES	31,883.00
BZW SECURITIES	150,680.34	WORLDSEC INTERNATIONAL SECURITIES	31,095.31
ALPHA MANAGEMENT INC	143,574.76	C.J. LAWRENCE/DEUTSCH	30,595.05
MORGAN GRENFELL	139,317.93	CORRESPONDENT SERVICE	30,062.50
JP MORGAN	131,020.55	NELLSON COBBOLD LTD	29,302.83
SALOMON BROTHERS INC	129,573.70	MACQUARIE BANK SYDNEY	29,253.16
CAZENOVE, INC	115,423.12	ALEX BROWN + SONS	29,026.00
DEUTSCH BANK	113,472.35	CHEUVREUX DE VIRIEUX	28,949.62
OKASAN INTERNATIONAL	110,868.76	JACKSON PARTNERS	28,161.90
NATWEST SECURITIES	103,395.80	STURDIVANT & COMPANY	27,818.40
PEREGRINE BROKERAGE	101,748.33	CAPITAL INSTITUTIONAL	26,643.96
LEWCO SECURITIES	97,075.09	ERNST + COMPANY	26,340.00
FIBA NORDIC SECURITIES	96,810.41	EUROPE COMPANY	26,047.71
NIKKO SECURITIES CO	94,427.81	BANK OF NEW YORK	25,835.85
JEFFERIES + COMPANY	91,313.80	FIDELITY CAPITAL MARKETS	24,845.01
MONTGOMERY SECURITIES	90,971.21	FURMAN SELZ MAGER DIETZ + BIRNEY INC	23,797.00
WACO SECURITIES CO	87,949.29	SCHRODER SECURITIES INC	23,121.91
ALFRED BERG	85,133.96	WHEAT FIRST SECURITIES	23,014.00
SANTANDER INVESTMENT	83,706.89	TOKYO SECURITIES	22,893.62
COWEN + CO	81,178.00	PATRIA FINANCE	22,668.98
G. K. GOH	80,147.49	LAZARD FRERES AND COMPANY	21,730.81
PAINE WEBBER INC	79,397.72	THEO GILLSON	21,671.73
WEEDEN + COMPANY	79,275.26	KIM ENG SECURITIES	21,429.96
J B WERE + SON	74,989.44	EXANE PARIS	21,071.20
ENSKILDA SECURITIES	74,907.02	UBS SECURITIES INC	20,545.20
SCHROEDER MUNCHMEYER	74,522.40	BANK GESELLSCHAFT	20,513.23
NEUBERGER + BERMAN	71,768.45	THE CHICAGO CORPORATION	20,487.00
CANTOR FITZGERALD + COMPANY	68,423.88	BARCLAYS TRUST AND BANKING CO.	20,474.18
HOARE GOVETT	60,007.27	BV CAPITAL	20,329.04
WILSHIRE ASSOCIATES	59,985.50	HSBC	19,992.68
COUNTY NAT WEST	59,356.55	WR LAZARD LAIDLAW & MEAD	19,488.00
DEAN WITTER REYNOLDS	58,872.50	DAVY AND COMPANY	19,205.07
PARIBAS	56,971.91	WOOD GUNDY INC	19,111.39

Commissions Paid by **SEPARATE ACCOUNT STOCK ADVISORS to CLEARING BROKERS IN 1996** (*continued*)

BROKER	COMMISSIONS	BROKER	COMMISSIONS
QUAKER SECURITIES INC	$18,985.32	TUCKER ANTHONY + RL DAY	$13,612.00
SOCIETE GENERALE	18,399.07	ISI GROUP INC	13,605.38
STANDARD & POORS	18,038.00	BSN SOCIEDAD	13,561.77
WILLAIMS CAPITAL GROUP	17,878.00	VALORES FINAMEX	13,203.45
CITATION GROUP	17,868.00	PARETO FONDS	12,822.78
JAVELIN SECURITIES	17,826.43	ASESORES BURSATILES	12,585.38
KAY HIAN SECURITIES	17,772.41	HERMES SECURITIES	12,540.96
DBS SECURITIES	17,465.36	FRIEDMAN BILLINGS	12,423.00
ESI SECURITIES COMPANY	16,387.00	SVENSKA INTERNATIONAL	12,188.98
SHAW & CO	16,345.19	AB ASESORES MONEDA	12,116.40
DAI ICHI SECURITIES	16,170.29	GOLDIS INSTITUTIONAL SERVICES INC	11,850.00
CONNING AND COMPANY	16,167.00	FAHNESTOCK + COMPANY	11,702.60
YAMAICHI SECURITIES	15,978.69	LG SECURITIES	11,529.35
BANTCO CLEARANCE NEW YORK	15,854.87	BROWN BROTHERS HARRIMAN AND CO	11,436.00
U.S.CLEARING CORPORATION	15,758.40	WILSON HTM LIMITED	11,122.37
NEW JAPAN SECURITIES	15,242.19	BCI LONDON	10,907.26
LAWRENCE HELFANT INVESTMENTS	15,160.00	FIRST BOSTON CORP	10,884.93
IVOR JONES ROY	15,069.31	I. STREICHER	10,830.00
FACTSET DATA SYSTEMS	15,038.50	FRANKEL POLLAK VINDERINE	10,816.56
WERTHEIM + CO. INC	14,831.54	COUNTY SECURITIES	10,637.19
VOLPE WELTY & COMPANY	14,820.00	SPEAR LEEDS & KELLOGG	10,625.03
RASHID HUSSAIN SECURITIES	14,241.41	GREIG MIDDLETON & COMPANY	10,374.36
KLEINWORTH GRIEVESON	14,163.96	FRANK RUSSELL	10,334.00
INSINGER A DAM	13,696.52	SWISS BANK CORP.	10,160.99
		Other Brokers (181)	$97,632.33
		Total Commissions	**$15,851,478.23**

Commissions Paid by **SEPARATE ACCOUNT STOCK ADVISORS to CLEARING BROKERS**

1996-1995 Comparison

	1996	*1995*
Domestic Commissions	$5,132,183.66	$4,811,527.89
International Commissions	$10,719,294.57	$4,558,309.04
Total Commissions	$15,851,478.23	$9,369,836.93

Deferred Compensation *PROGRAM*

Act 1987-81 assigned to the SERS Board of Trustees the responsibility to establish and monitor an IRC Section 457 Deferred Compensation Program for Commonwealth officers and employes through which members could volunteer to build retirement savings by deferring a portion of their salary to selected investment options.

1996 Highlights

The Deferred Compensation Program initiated two new features intended to improve participant service:

- Effective July 1996, a participant leaving the program has the benefit of receiving Automated Clearing House direct deposit of the benefit payment check to his or her financial institution.
- A telephone Voice Response Unit (VRU) has been implemented, allowing participants to check their account information and request forms without having to speak to a Helpline counselor.

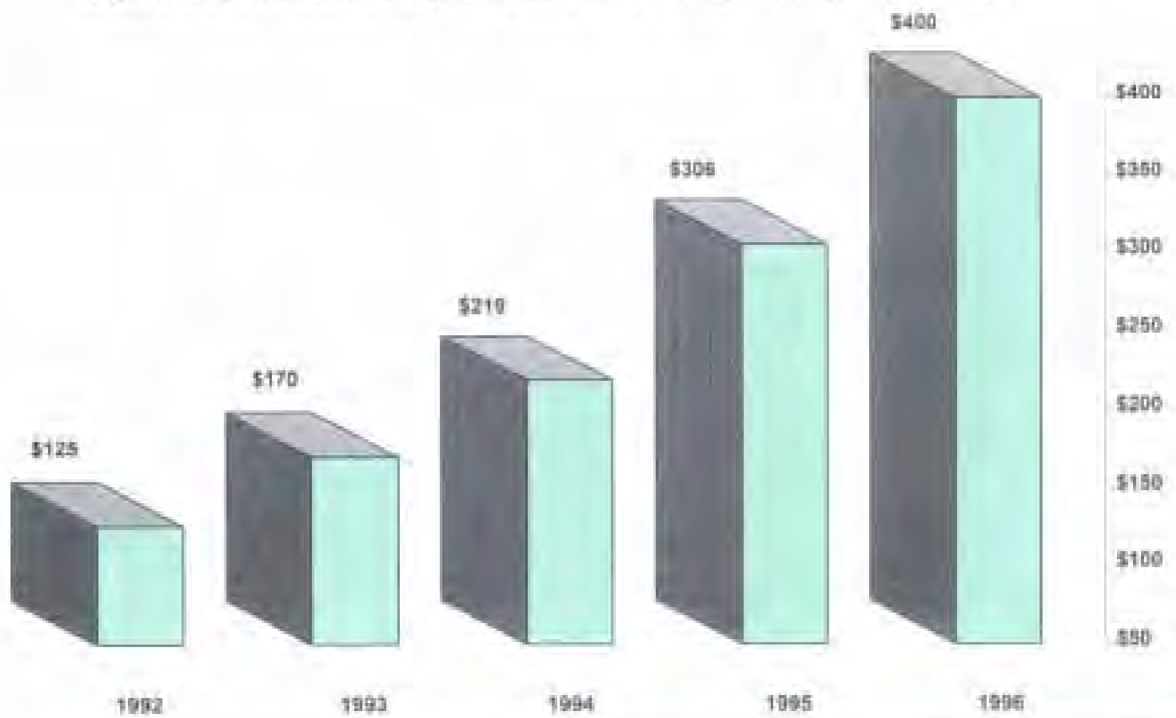
In August, the U.S. Small Business Job Protection Act was signed into law, requiring or allowing several changes to IRC Section 457 Deferred Compensation Programs:

- Deferred Compensation Programs are required to be Trusts by January 1, 1999;
- Programs may allow for a one-time change to the benefit commencement date;
- Programs may allow for inactive accounts, a cash-out provision of $3,500 or less; and
- Programs may allow for indexation of maximum deferred benefits.

Growth of the Program

During the period from December 31, 1992, through the end of 1996, Deferred Compensation Program assets more than tripled in value. As of December 31, 1996, the total market value of program investments was more than $400 million, and there were more than 26,000 active participants.

Deferred Compensation Program assets, 1992 through 1996 ($ in millions)

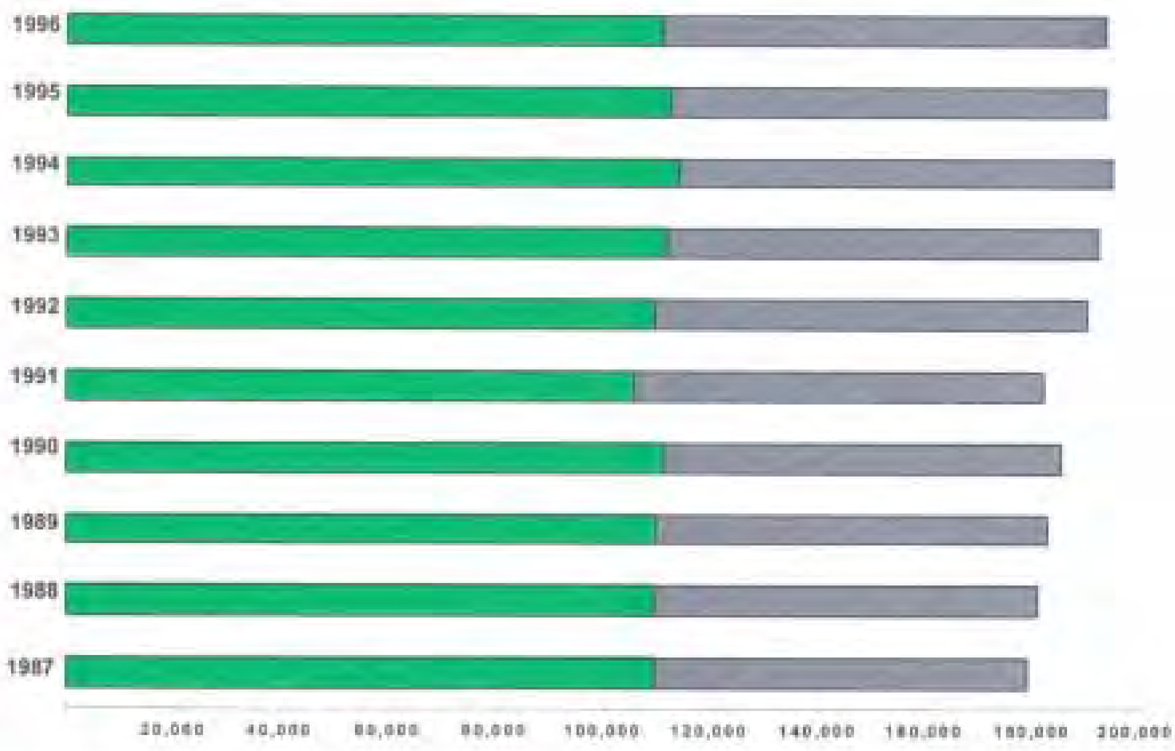


Member *DEMOGRAPHICS*

Year Ending December 31	Total Members	Active Employes	Former Employes & Survivors
1996	194,008	110,922	83,086
1995	193,841	112,637	81,204
1994	194,955	114,120	80,835
1993	192,652	111,962	80,690
1992	190,101	109,609	80,492
1991	181,971	105,731	76,240
1990	185,470	111,248	74,222
1989	182,649	109,819	72,830
1988	180,927	109,611	71,316
1987	179,014	109,499	69,515

Number of SERS members 1987 through 1996

By Active Employes and Former Employe & Survivor Counts



Source: SERS annual Actuarial Reports *prepared by Hay/Huggins Company*

Member *DEMOGRAPHICS (continued)*

Profile of Active Employes as of December 31, 1996

Average Age	44.69
Average Years of Service	13.00

Profile of Annuitants as of December 31, 1996

Annuitant Type	Average Age	Average Pension
Normal	74.1	$10,150
Early	57.7	$8,322
Disability	59.4	$7,587
Beneficiary & Survivor	75.0	$5,094

Source: SERS 1996 Actuarial Report, *Hay/Huggins Company*

Hay/Huggins Company, Inc
Actuarial and Benefits Consultants
1500 K Street, N.W.
Suite 1000
Washington, DC 20005
(202) 637-6600
Fax: (202) 637-0160

May 21, 1997

Hay/Huggins Company

Retirement Board
Pennsylvania State Employes'
Retirement System
30 North Third Street
Harrisburg, Pa. 17101

Dear Board Members:

An actuarial valuation was last performed as of December 31, 1996 to determine actuarial liabilities under the Pennsylvania State Employes' Retirement System. The valuation was carried out in accordance with sound actuarial principles in a manner which, in my opinion, reflects the applicable provisions of the State Employes' Retirement Code. The valuation also served as the basis for determining the contributions required to be made by the Commonwealth to fund the liabilities of the System.

Valuations are made annually based on data supplied by the staff of the Retirement Board. The experience under the Retirement System is reviewed every five years. The last such review was for the period of 1991 to 1995. The results of the review are used to develop the assumptions underlying the actuarial valuations. Thus, required contributions are determined on a sound actuarial basis reflecting actual experience under the system.

Sincerely,

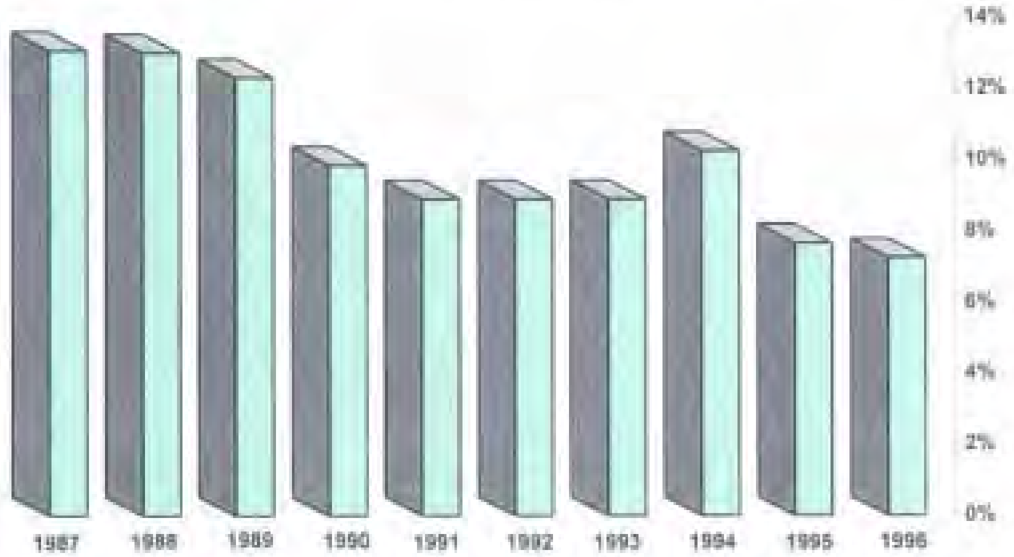
Edwin C. Hustead
Senior Vice President

HayGroup

Contribution *RATES*

As noted elsewhere in this report, SERS's investments have produced an annualized 10-year investment rate of return of +11.5% after fees as of December 31, 1996. As reported in the annual *Actuarial Reports* produced for SERS by independent actuary Hay/Huggins Company, the Commonwealth's total employer contribution rate was 13.09% of payroll in 1987. Due in part to the substantial investment returns achieved well in excess of the actuarially assumed rates of return and based on the 1996 *Actuarial Report*, the actual employer contribution rate in 1996 was further reduced to 7.28% of payroll.

*Employer contribution rate by year of valuation 1987 through 1996**



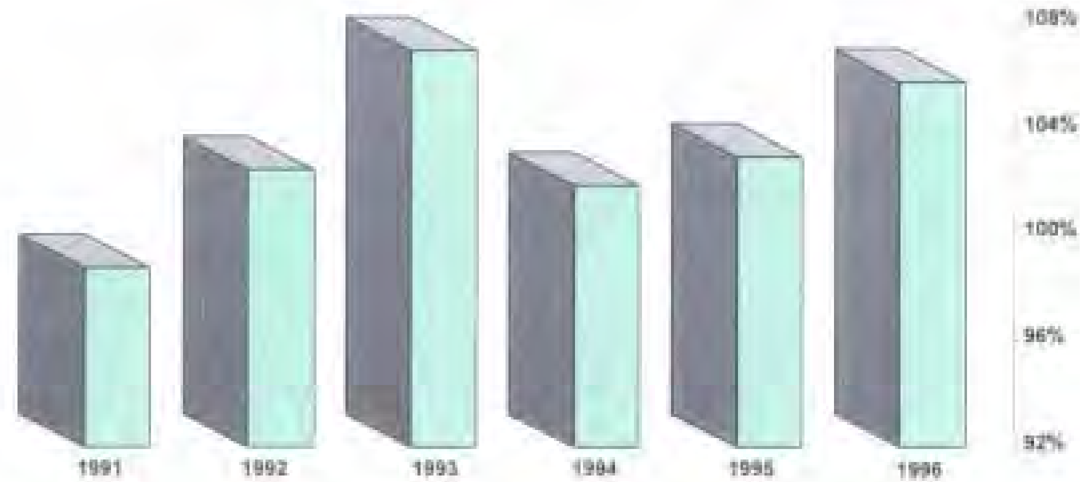
**The total employer cost is the actual contribution rate during the succeeding fiscal year. For instance, the 1996 rate of 7.28% is the employer contribution rate for fiscal year 1997-1998. Source: SERS 1996* Actuarial Report, *Hay/Huggins Company.*

Funded *STATUS*

Annually, SERS's consulting actuary performs an actuarial valuation, determining, among other things, the funded status of the benefit plan. In 1992, for the first time, the actuarial value of SERS assets exceeded the actuarial accrued liability, meaning the plan attained fully-funded status, with adequate reserves set aside for past service liabilities.

The chart below shows SERS's funded ratios for the period 1990 through 1996 determined in conformance with the new reporting requirements of Statement No. 25 of the Governmental Accounting Standards Board (GASB). This measure reports the progress toward achieving the funding objectives of the plan using the same method employed to determine the plan's funding requirements. These ratios differ from previous years because, under the new standard of GASB Statement No. 25, the actuarial liability is calculated using assumptions consistent with those that determine the funding requirements of the plan and values the assets using an actuarial smoothing technique. Thus, the funded ratio is the actuarial value of assets divided by the actuarial accrued liability. This differs from the Projected Benefit Obligation reported in previous years under GASB Statement No. 5, which reported assets at their market value as of the report date and measured the liability using standardized accounting measures.

SERS funded ratio, 1991 through 1996



**Source: SERS actuary, Hay/Huggins Company.*

Section 4

INDEPENDENT AUDITORS' REPORT *and* FINANCIAL STATEMENTS

KPMG Peat Marwick LLP

225 Market Street
Suite 300
P.O. Box 1190
Harrisburg, PA 17108-1190

Independent Auditors' Report

The Board of Trustees
Commonwealth of Pennsylvania
State Employes' Retirement System:

We have audited the accompanying statement of plan net assets of the Commonwealth of Pennsylvania State Employes' Retirement System (a component unit of the Commonwealth of Pennsylvania) as of December 31, 1996, and the related statement of changes in plan net assets for the year then ended. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audit. The accompanying financial statements as of December 31, 1995, were audited by other auditors whose report thereon dated May 31, 1996, expressed an unqualified opinion on those statements, before the restatements described in note 2 to the financial statements.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the 1996 financial statements referred to above present fairly, in all material respects, the financial position of the Commonwealth of Pennsylvania State Employes' Retirement System as of December 31, 1996, and the results of its operations for the year then ended in conformity with generally accepted accounting principles.

As discussed in note 2 to the financial statements, the System adopted Governmental Accounting Standards Board Statements No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans* and No. 27, *Accounting for Pensions by State and Local Governmental Employers*, retroactively as of January 1, 1995. It also adopted Governmental Accounting Standards Board Statement No. 28, *Accounting and Financial Reporting for Securities Lending Transactions*, retroactively as of January 1, 1996.

The information included in Required Supplemental Schedules 1 and 2 is not a required part of the basic financial statements but is supplementary information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and express no opinion on it.

KPMG Peat Marwick LLP

May 9, 1997

COMMONWEALTH OF PENNSYLVANIA
STATE EMPLOYES' RETIREMENT SYSTEM
(a component unit of the Commonwealth of Pennsylvania)

Statements of Plan Net Assets
December 31, 1996 and 1995

(Amounts in thousands)

	1996	1995
Assets:		
Receivables:		
Plan members	$ 413	1,509
Employers	14,774	99,214
Investment income	97,345	77,573
Investment proceeds	130,113	278,972
Miscellaneous	694	199
Total receivables	243,339	457,467
Investments:		
Short-term investment fund	470,865	504,691
Securities lending collateral pool	1,436,603	—
United States government securities	1,583,177	1,608,247
Corporate and foreign bonds and notes	2,635,494	2,319,434
Common and preferred stocks, including collective trust funds	11,794,444	10,053,172
Mortgage loans	406,983	448,233
Real estate	1,395,008	1,191,322
Venture capital and alternative investments	551,805	337,121
Total investments	20,274,379	16,462,220
Total assets	20,517,718	16,919,687
Liabilities:		
Accounts payable and accrued expenses	23,601	13,039
Benefits payable	1,747	1,906
Investment purchases payable	563,551	561,933
Obligations under securities lending	1,436,603	—
Total liabilities	2,025,502	576,878
Net assets held in trust for pension benefits (A schedule of funding progress is presented on page 57)	$18,492,216	16,342,809

See accompanying notes to financial statements.

Statements of Changes in Plan Net Assets
Years ended December 31, 1996 and 1995

(Amounts in thousands)

	1996	1995
Additions:		
Contributions:		
Plan members	$ 209,581	201,719
Employers	373,902	384,506
Total contributions	583,483	586,225
Investment income:		
Net appreciation in fair value of investments	1,915,391	2,761,871
Interest	369,477	357,963
Dividends	195,534	162,068
Securities lending income	80,350	2,623
Miscellaneous	82,031	76,077
Total investment income	2,642,783	3,360,602
Less:		
Investment expenses	59,382	38,240
Securities lending expenses	74,071	–
Total investment and securities lending expenses	133,453	38,240
Net investment income	2,509,330	3,322,362
Total additions	3,092,813	3,908,587
Deductions:		
Benefits	918,218	869,905
Refunds of contributions	10,126	9,807
Administrative expenses	15,062	14,431
Total deductions	943,406	894,143
Net increase	2,149,407	3,014,444
Net assets held in trust for pension benefits:		
Balance, beginning of year, as restated (note 2)	16,342,809	13,328,365
Balance, end of year	$18,492,216	16,342,809

See accompanying notes to financial statements.

Notes to Financial Statements

December 31, 1996 and 1995

(1) Organization and Description of the System

Organization

The Commonwealth of Pennsylvania State Employes' Retirement System (the System) was established as of June 27, 1923, under the provisions of Public Law 858, No. 331.

The System is the administrator of a cost-sharing multiple-employer defined benefit retirement system established by the Commonwealth of Pennsylvania (Commonwealth) to provide pension benefits for employes of state government and certain independent agencies. The System is a component unit of the Commonwealth of Pennsylvania and is included in the Commonwealth's financial report as a pension trust fund.

The System is established by state law as an independent administrative board of the Commonwealth and is directed by a governing board that exercises control and management of the System, including the investment of its assets. The System's board has eleven members including the State Treasurer, ex officio, two Senators or former Senators, two members or former members of the House of Representatives, and six members appointed by the Governor, one of whom is an annuitant of the System. At least five board members are active members of the System and at least two have ten or more years of credited service.

The Treasurer of the Commonwealth of Pennsylvania is the custodian of the State Employes' Retirement System's fund.

The System's financial reporting entity includes several real estate title holding companies, which are presented as blended component units. These legally separate companies, which are created for the purpose of investing System funds in individual real estate holdings, have Boards of Directors comprised entirely of System personnel appointed by the System's Executive Director under authority from the System's Board of Directors. Separate financial statements of the real estate title holding companies are not issued.

Membership in the System is mandatory for most state employes. Members and employes of the General Assembly, certain elected or appointed officials in the executive branch, department heads, and certain employes in the field of education are not required, but are given the option, to participate. At December 31, 1996 and 1995, System membership consisted of:

	1996	1995
Retirees and beneficiaries currently receiving benefits	83,086	81,204
Terminated employes entitled to benefits but not yet receiving them	4,375	3,724
Current employes:		
Vested	62,804	67,594
Nonvested	48,118	45,043
Total members	198,383	197,565
Number of participating agencies	108	109

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(1) Continued

Pension Benefits

The System provides retirement, death, and disability benefits. Generally, retirement benefits vest after 10 years of credited service. Ad hoc cost-of-living adjustments are provided at the discretion of the General Assembly. There were no ad hoc postretirement benefit increases in 1996 or 1995. Article II of the Commonwealth of Pennsylvania's Constitution assigns the authority to establish and amend the benefit provisions of the plan to the General Assembly. Employes who retire at age 60 with 3 years of service, or with 35 years of service if under age 60, are entitled to a normal annual retirement benefit. Members of the General Assembly and certain employes classified in hazardous duty positions can retire with full benefits at age 50, with at least 3 years of service.

The general annual benefit is 2% of the member's highest three-year average salary times years of service. Members of the General Assembly who were members of the System before March 1, 1974, are entitled to a benefit of 7.5% of final average salary for each year of service. State police are entitled to a benefit equal to a percentage of their highest annual salary, excluding their year of retirement. The benefit is 75% of salary for 25 or more years of service and 50% of salary for 20-24 year of service.

According to the Retirement Code, all obligations of the System will be assumed by the Commonwealth should the System terminate.

Contributions

The System's funding policy, as set by the System's Board, provides for periodic active member contributions at statutory rates. The System's funding policy also provides for periodic employer contributions at actuarially determined rates, expressed as a percentage of annual covered payroll, such that they, along with employe contributions and an actuarially determined rate of investment return, are adequate to accumulate assets to pay benefits when due. Level percentages of payroll employer contribution rates are determined using a variation of the entry age normal actuarial funding method. A variation of the entry age normal actuarial cost method is used to determine the liabilities and costs related to all of the System's benefits including superannuation, withdrawal, death, and disability benefits. The significant difference between the method used for the System and the typical entry age normal actuarial cost method is that the normal cost is based on the benefits and contributions for new employes rather than for all current employes from their date of entry. This variation should produce approximately the same results as the typical method over the long run. These rates are computed based upon actuarial valuations on the System's fiscal year end of December 31 and applied to the Commonwealth based on its fiscal year end June 30; therefore, the employer contribution rates in effect for the System's year end of December 31 reflect a blended average of calculated rates. The blended contribution rates were as follows:

	1996	1995
Employer normal cost	9.61 %	10.48 %
Amortization of unfunded actuarial asset	(2.09)	(2.30)
Amortization of supplemental annuities	1.46	1.22
Total employer cost	8.98 %	9.40 %

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(1) Continued

Generally, employes are required to contribute to the System at a rate of 5% of their gross pay. Judges and district justices have the option of electing special membership classes requiring a contribution of 10.0% and 7.5%, respectively. The contributions are recorded in an individually identified account that also is credited with interest, calculated at 4% per annum, as mandated by statute. Accumulated employe contributions and credited interest vest immediately and are returned to the employe upon termination of service if the employe is not eligible for other benefits.

(2) Summary of Significant Accounting Policies

Basis of Accounting

The financial statements of the System are prepared on the accrual basis of accounting under which expenses are recorded when the liability is incurred, revenues are recorded in the accounting period in which they are earned and become measurable, and investment purchases and sales are recorded as of their trade date. Member and employer contributions are recognized in the period in which employes salaries are reported. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

Pursuant to GASB Statement No. 20, *Accounting and Financial Reporting for Proprietary Funds and Other Governmental Entities that Use Proprietary Fund Accounting*, the System follows GASB guidance as applicable to proprietary funds and applies only those applicable Financial Accounting Standards Board (FASB) Statements and Interpretations, Accounting Principles Board Opinions, and Accounting Research Bulletins issued on or before November 30, 1989, that do not conflict with or contradict GASB pronouncements.

The accounting and reporting policies of the System conform to generally accepted accounting principles (GAAP). The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

In November 1994 the Governmental Accounting Standards Board (GASB) issued Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans* (GASB Statement No. 25). GASB Statement No. 25 requires a change in the System's financial statement format as well as certain changes in the recognition of transactions. Under GASB Statement No. 25, the two required statements are the statement of plan net assets and the statement of changes in plan net assets. GASB Statement No. 25 also requires plan investments to be recorded at their fair value.

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(2) **Continued**

The System adopted GASB Statements No. 25 retroactively as of January 1, 1995. The effect of adopting this Statement was a decrease in net assets at January 1, 1995, and an increase in the change in net assets for the year ended December 31, 1995, as follows (amounts in thousands):

		January 1, 1995
Net assets held in trust for pension benefits before restatement	$	13,330,276
Increase in plan liabilities		1,911
Net assets held in trust for pension benefits after restatement	$	13,328,365

		Year ended December 31, 1995
Net increase in net assets before restatement	$	3,014,439
Decrease in refunds of contributions deduction		5
Net increase in net assets after restatement	$	3,014,444

In November 1994 the GASB also issued Statement No. 27, *Accounting for Pensions by State and Local Governmental Employers* (GASB Statement No. 27). GASB Statement No. 27 establishes standards for the measurement, recognition, and display of pension expense and related liabilities, assets, and note disclosures. The System adopted the provisions of GASB Statement No. 27 retroactively as of January 1, 1995. There was no pension liability (asset) at transition or before transition to GASB Statement No. 27. As such, there was no effect on net assets from the adoption of GASB Statement No. 27.

In May 1995 the GASB issued Statement No. 28, *Accounting and Financial Reporting for Securities Lending Transactions* (GASB Statement No. 28). GASB Statement No 28 establishes accounting and financial reporting standards for securities lending transactions. GASB Statement No. 28 requires that securities lent and certain collateral received on securities lent be recorded as assets on the statement of plan assets with a corresponding liability being recorded for such collateral. GASB Statement No. 28 also requires that costs incurred from securities lending transactions be reported as expenses and not netted with interest income from investment of the collateral received. The System adopted the provisions of GASB Statement No. 28 retroactively as of January 1, 1996. Retroactive restatement of the financial statements for 1995 was not practical because the necessary information was not available. There was no effect on net assets from the adoption of GASB Statement No. 28.

Investments

The System's investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller–that is, other than in a forced or liquidation sale. The investment in the short-term investment fund, which is a fund operated by the Treasurer of the Commonwealth of Pennsylvania, is reported at cost plus allocated interest, which approximates fair value. The security lending collateral pool, which is a fund operated by the securities lending agent, also is accounted for at cost plus accrued interest. U.S. govern–

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(2) Continued

ment obligations, corporate and foreign bonds and notes, and common and preferred stocks, including collective trust funds, are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Securities that are not traded on a national security exchange are valued by the asset manager or third parties based on similar sales. Mortgage loans are valued by the asset manager using the present value of future cash flows. Real estate is primarily valued based on appraisals performed by independent appraisers or, for properties not appraised, at the present value of the projected future net income stream. Venture capital and alternative investments are valued based on amounts established by valuation committees. Futures contracts and foreign exchange contracts, which are not reported in the statement of plan net assets, are marked-to-market daily with changes in fair value recognized as part of investment income.

Unsettled investment sales are reported as investment proceeds receivable and unsettled investment purchases are reported as investment purchases payable. Investment expenses consist of investment managers' fees and those administrative expenses directly related to the System's investment operations.

Compensated Absences
The System accrues a liability for vacation leave as the benefits are earned by the employes to the extent the System will compensate the employe for the benefits through paid time off or some other means, such as cash payments at termination or retirement. Vacation leave vests 100% at the time it is earned up to 45 days, which are carried over to the next year at December 31. The System also accrues a liability for sick leave as the benefits are earned by the employes to the extent the System will compensate the employe for the benefits through cash payments at termination or retirement. Retiring employes of the System that meet service, age, or disability requirements are paid between 30% and 100% of sick days available at retirement, up to 163 maximum days paid. As of December 31, 1996 and 1995, $1,262,170 and $1,201,880, respectively, was accrued for unused vacation and sick leave for the System's employes.

Administrative Expenses
Administrative expenses are financed through investment earnings.

Federal Income Taxes
Management believes the System meets the definition of a Governmental Plan; in the System's communications with the Internal Revenue Service (IRS), it has been treated as a qualified plan. Therefore, the System has not requested a determination letter from the IRS relating to the status of the System under the Internal Revenue Code.

The real estate holding companies discussed in note 1 are formed and operate under the Internal Revenue Code 501(c)(25) and are exempt from federal taxes on income related to their tax exempt purpose.

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(2) Continued

Risk Management

The System is exposed to various liabilities or risks of loss related to theft or destruction of assets, injuries to employes, and court challenges to fiduciary decisions. To cover such risks, the System carries directors and officers' liability insurance, and fiduciary liability insurance. It also requires asset managers to carry appropriate insurance policies. As an administrative agency of the Commonwealth, the System is accorded sovereign immunity, and it participates in a state property insurance program. As Commonwealth employees, the System's employees receive health insurance benefits, disability retirement benefits, and worker's compensation benefits.

Reclassifications

Certain reclassifications were made to the fiscal year 1995 financial statements to conform with the fiscal year 1996 financial statement presentation.

(3) Description of Funds

The Code requires the System to maintain the following funds representing the reserves held for future and current benefit payments as follows:

Members Savings Account – The fund that accumulates contributions and interest earnings of active employes totaled $2,646 million and $2,498 million as of December 31, 1996 and 1995, respectively.

State Accumulation Account – The fund that accumulates contributions of the employers and the earnings of the fund totaled $10,362 million and $9,251 million as of December 31, 1996 and 1995, respectively. The balance of this fund is actuarially determined.

Annuity Reserve Accounts – The funds from which all death and retirement benefits and supplemental annuities are paid totaled $5,166 million and $4,281 million for Annuitants and Beneficiaries, $1,002 million and $959 million for State Police; and $20 million and $17 million for Enforcement Officers as of December 31, 1996 and 1995, respectively. The balance of this fund is actuarially determined.

Supplemental Annuity Account – The fund that accumulates contributions for supplemental annuities totaled ($704) million and ($663) million, as of December 31, 1996 and 1995, respectively. The balance of this fund is actuarially determined. The negative balances represent the liability for past cost of living adjustments that are being amortized to actuarial required contributions over a period of 20 years from the effective date of each supplement.

Interest Reserve Account – The fund that accumulates all income earned by the fund and from which all administrative and investment expenses incurred by the fund and the Board necessary for operation of the System are paid. Any balance in this reserve is transferred to the State Accumulation Account at year end.

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(4) Investments

As provided by statute, the System's Board of Trustees (Board) has exclusive control and management responsibility of System funds and full power to invest the funds. In exercising its fiduciary responsibility to System membership, the Board is governed by the "prudent person" rule, which requires the exercise of due care in establishing investment policy, and has adopted its Statement of Investment Policy to formally document investment objectives and responsibilities. This policy, as well as applicable state law, establishes guidelines for permissible investments of the System, including all investment types held in the portfolio at December 31, 1996 and 1995, and at all times during those years.

Government Accounting Standards Board Statement No. 3
The System's investments are categorized to give an indication of the level of credit (counterparty) risk assumed by the System at December 31, 1996 and 1995. In accordance with a contractual relationship between the Commonwealth's Treasury Department and a custodial agent, all investments subject to categorization are held in book-entry form in the Commonwealth's name. Therefore, all such investments are in Category 1, which is defined as insured or registered investments for which the securities are held by the System or its agent in the System's name. The amount of Category 1 securities, which does not include uncategorized investments as described below or securities on loan as described later in note 4, is approximately $14,505 million and $12,913 million for the years ended December 31, 1996 and 1995, respectively.

Investments may also be categorized as Category 2, which is defined as uninsured or unregistered investments for which the securities are held by the counterparty's trust department or agent in the System's name, and Category 3, which is defined as uninsured or unregistered investments for which the securities are held by the broker or dealer or by its agent but not in the System's name. The System has no investments that would be classified in Categories 2 or 3.

The System does have investments that are not in any of the three defined categories because securities are not used as evidence of the investment or because the securities have been loaned. Such investments are the short-term investment fund, the securities lending collateral pool, collective trust funds, mortgage loans, real estate, venture capital investments, and investments held by broker/dealers under securities lending agreements. The amount of unclassified collective trust funds was approximately $5,187 million at December 31, 1996, and $5,885 million at December 31, 1995.

The System's real estate holdings that are located in the Commonwealth of Pennsylvania total approximately $223 million and $199 million or 16.1% and 16.7% of the real estate portfolio at December 31, 1996 and 1995, respectively. Concentrations of investments in a particular geographic area have certain risks and uncertainties associated with the concentration. The System's remaining real estate investments are not concentrated in any one geographic area or industry.

The System's investments in corporate and foreign bonds and notes include approximately $650 million and $570 million of high yield bonds at December 31, 1996 and 1995, respectively.

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(4) Continued

The fair value of individual investments that represent 5% or more of the System's net assets available for benefits are as follows (amounts in thousands):

		1996	1995
Barclays Global Investors N.A.:			
Equity Index Fund P – 113,172,080 and 160,197,334 units in 1996 and 1995, respectively	$	3,003,175	3,456,964
70/30 Enhanced U.S. Tactical Asset Allocation Fund – 41,889,414 and 44,765,633 units in 1996 and 1995, respectively		945,313	875,397
Extended Equity Market Fund – 15,304,050 units in 1995		*	956,246

* Does not meet 5% disclosure criteria.

The 70/30 Enhanced U.S. Tactical Asset Allocation Fund is diversified among three collective funds: equity, which is invested primarily in Standard & Poor's 500 Companies; long-term fixed income, which is invested in corporate notes and bonds; and the short-term cash fund, which is invested in money market instruments.

The System also invests in fixed income derivatives such as collateral mortgage obligations (CMOs) to increase the return to the portfolio. Some forms of the System's CMOs, namely generics and planned amortization class securities, offer more defined cash flow characteristics, and are therefore preferred in volatile interest rate environments. Other types of the System's CMOs (interest-only strips, principal only strips, and inverse floaters) behave less predictably and can offer value when interest rates remain stable. CMOs pose no greater credit risk than any other investment grade holding; therefore, significant defaults are not anticipated. Investment managers control credit risk through credit evaluation and ongoing performance analysis. However, underlying risk exists to the extent that an underlying security of a pool does not meet or perform according to the terms of the CMO. Under the circumstances, the CMO has well defined rules on the remittance of the reserve pools for principal and interest for defaulted collateral. Investments in these derivatives are not prohibited under the "prudent person" provisions which governs the investment policy and practices of the System. The fair value of CMOs at December 31, 1996, is $172 million.

Through the collective trust funds, the System also invests indirectly in certain derivative financial instruments. The collective trust funds participate in securities lending and invest cash collateral in an investment pool that invests in foreign exchange forwards, futures contracts, and asset, total return, and basis swap contracts. These instruments are held to hedge foreign exchange exposure, to synthetically create floating rate returns, and to manage interest rate risk by altering the average life of the portfolio.

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(4) Continued

Commission Recapture Program

The System has commission recapture contracts with several brokers. These contracts stipulate that the brokers pay a percentage of commissions earned on investments directly to vendors for services provided to the System. During the year ended December 31, 1996 and 1995, the System earned $867,000 and $613,000 of benefits resulting from a commission recapture program, respectively. The System used the program to pay approximately $746,000 and $587,000 on consulting, advisory, and other expenditures for the years ended December 31, 1996 and 1995, respectively. At December 31, 1996 and 1995, the System has accumulated $546,000 and $425,000, respectively, of benefits that are available for future expenditures.

Securities Lending

In accordance with a contract between the Commonwealth's Treasurer and its custodian, the System participates in a securities lending program. State statutes neither specifically authorize nor prohibit the lending of the System's securities.

The custodian, acting as lending agent, lends the System's equity, debt, and money market securities for cash, securities, or letter-of-credit collateral. Collateral is required at 102% of the fair value of the securities loaned except for the equity securities of non-U.S. corporations, for which collateral of 105% is required. Collateral is marked-to-market daily. If the collateral falls below guidelines for the fair value of the securities loaned, additional collateral is obtained. Cash collateral is invested by the lending agent in accordance with investment guidelines approved by the Treasurer. The lending agent cannot pledge or sell securities collateral unless the borrower defaults.

As of December 31, 1996, the System's credit exposure to individual borrowers was less than $350,000 because the amounts the System owed the borrowers generally exceeded the amounts the borrowers owed the System. Similar information is not available as of December 31, 1995. The Treasurer's contract with the lending agent requires the agent to indemnify the System if the borrowers fail to return the underlying securities and the collateral is inadequate to replace the loaned securities or if the borrowers fail to pay income distributions on the loaned securities.

All securities loans at December 31, 1996 and 1995 could be terminated on demand by either the lending agent or the borrower. Cash collateral is invested, together with the cash collateral on securities loans of some other Commonwealth entities, in a short-term collective investment pool. The duration of the investments in the pool at December 31, 1996, was 53 days; a similar duration is not available for the pool at December 31, 1995. The relationship between the average maturities of the investment pool and the System's loans is affected by the maturities of the loans made by other entities in the investment pool.

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(4) **Continued**

In addition, the interest rate risk posed by mismatched maturities is affected by other program features, such as the lending agent's ability to reallocate securities loans among all of its lending customers.

		1996	1995
		(000's omitted)	
Investments held by broker/dealers under securities lending agreements:			
United States government securities	$	400,112	575,893
Corporate bonds and notes		72,063	38,748
Common and preferred stocks		367,414	191,413
International securities		662,908	255,983
	$	1,502,497	1,062,037

(5) **Financial Instruments with Off-Balance Sheet Risk**

The System enters into foreign exchange contracts, such as forward and spot contracts, to hedge foreign currency exposure. Some foreign currency options also are used for this purpose. The System is not a dealer but an end-user of these instruments. The contracts are used primarily to enhance performance and reduce the volatility of the portfolio. Contracts used to enhance performance are fully collateralized, eliminating the use of leverage in the portfolio. The System is exposed to credit risk in the event of nonperformance by counterparties to financial instruments. As the System generally enters into transactions only with high quality institutions, no losses associated with counterparty nonperformance on derivative financial instruments have been incurred. Legal risk is mitigated through careful selection of brokers and an extensive process of review of all documentation. The System is exposed to market risk—the risk that future changes in market conditions may make an instrument less valuable. Exposure to market risk is managed within risk limits set by management by buying or selling instruments or entering into offsetting positions.

At December 31, 1996, the System had contracts maturing through December 4, 1997, to purchase or sell foreign currency as follows (amounts in thousands):

		Buy at spot rate	Sell at spot rate	Net (payable) receivable
Deutschmark	$	330,865	698,533	(367,668)
French Franc		194,988	298,055	(103,067)
Pound Sterling		381,884	546,215	(164,331)
Japanese Yen		176,666	416,169	(239,503)
Swedish Kroner		—	105,265	(105,265)
Other		209,564	445,536	(235,972)
	$	1,293,967	2,509,773	(1,215,806)

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(5) Continued

At December 31, 1995, the System had contracts maturing through March 27, 1996, to purchase or sell foreign currency as follows (amounts in thousands):

		Buy at spot rate	Sell at spot rate	Net (payable) receivable
Deutschmark	$	—	113,461	(113,461)
French Franc		23,661	52,256	(28,595)
Swedish Kroner		147	5,704	(5,557)
Japanese Yen		4,438	171,545	(167,107)
Other		13,382	115,707	(102,325)
	$	41,628	458,673	(417,045)

(6) Pension Plan for Employes of the System

The System also makes contributions to the System as an employer. The System's employes' contribution requirements and benefits are described in note 1 to these financial statements. The System's contributions for the years ended December 31, 1996, 1995, and 1994, were $555,817, $573,658, and $492,763, respectively, which were equal to the required contributions each year.

(7) Operating Lease

The System leases office space under a 10 year operating lease with Third and Walnut, Inc., beginning in 1992 with an option to renew for three five year periods. Third and Walnut, Inc. is a real estate title holding company that is a component unit of the System. Total costs for the lease were $830,469 and $821,686 for the years ended December 31, 1996 and 1995, respectively. The future minimum lease payments for this lease are as follows:

Year ending December 31,		
1997	$	814,880
1998		820,363
1999		820,363
2000		820,363
2001		820,363
Thereafter		820,363
Total	$	4,916,695

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(8) Litigation and Contingencies

The System is involved in various individual lawsuits, generally related to benefit payments, for which an estimate of the effect, if settled adversely, cannot be made. However, the individual cases involve legal issues that, if extended to the entire membership, may result in significant costs to the System. If such an event were to occur, the additional costs would be recovered by the System through adjustments to the employer contribution rate.

(9) New Accounting Pronouncements

In March 1997, the Governmental Accounting Standards Board issued its Statement No. 31, *Accounting and Financial Reporting for Certain Investments and for External Investment Pools*. The Statement is effective for financial statements for periods beginning after June 15, 1997, although earlier application is encouraged.

For defined benefit pension plans, Statement No. 31 provides guidance for applying fair value to investments in securities subject to purchased put and written call option contracts, open-end mutual funds, external investment pools, and interest-earning investment contracts.

Required Supplemental Schedule 1
Schedule of Funding Progress
(Unaudited)
(dollar amounts in millions)

Actuarial valuation year	Actuarial value of assets	Actuarial accrued liabilities (AAL)	Unfunded actuarial accrued liabilities (UAAL)	Ratio of assets to AAL	Covered payroll	UAAL as a percentage of covered payroll
1996	$ 16,841.1	15,936.6	(904.5)	105.7 %	3,996.0	(22.6) %
1995	15,510.3	15,067.2	(443.1)	102.9	3,861.0	(11.5)
1994	13,991.5	13,742.1	(249.4)	101.8	3,713.7	(6.7)
1993	13,060.6	12,213.7	(846.9)	106.9	3,487.5	(24.3)
1992	11,769.4	11,488.4	(281.0)	102.4	3,284.4	(8.6)
1991	10,790.2	10,937.8	147.6	98.7	3,221.1	4.6

Required Supplemental Schedule 2
Schedule of Employer Contributions
(dollar amounts in thousands)

Year ended December 31	Annual required contributions	Percentage contributed
1996	$ 373,902	100.0 %
1995	376,692	102.1
1994	342,158	100.2
1993	310,089	98.1
1992	319,093	100.0
1991	381,347	100.0

See accompanying notes to required supplementary schedules.

Notes to Required Supplemental Schedules
(Unaudited)
December 31, 1996 and 1995

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation date	December 31, 1996
Actuarial cost method	*Variation of entry age actuarial cost method
Amortization method	Increasing (5 percent annually)
Remaining amortization period	14 to 19 years, closed
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investments rates of return**	8.5%
Projected salary increases**	5.16% - 8.98%
**Includes inflation at	3%
Cost-of-living adjustments	None

* A variation of the entry age normal actuarial cost method is used to determine the liabilities and costs related to all of the System's benefits including superannuation, withdrawal, death and disability benefits. The significant difference between the method used for the System and the typical entry age normal actuarial cost method is that the normal cost is based on the benefits and contributions for new employes rather than for all current employes from their date of entry. This variation should produce approximately the same results as the typical method over the long run.

Certain changes have been made in the plan or in actuarial assumptions that affect the trends in the amounts reported in the schedule of funding progress. Those changes also affected the trend in the annual required contributions reported in the schedule of employer contributions. Those changes were effective for the actuarial valuation report dated as of December 31, 1995. Before those changes were made, actuarial assumptions for which there was a change were as follows:

Actuarial assumptions:	
Investment rates of return	9.25%
Projected salary increases	6.70%

(Continued)

Notes to Required Supplemental Schedules (Unaudited)

In addition the demographic assumption was changed from the 1971 Group Annuity Mortality Table (GAM - 71) to the 1983 Group Annuity Mortality Table (GAM - 83) for current and future employes to reflect continuing morality improvement. The GAM - 71 continues to apply for current retirees.

In 1994, the actuarial assumption changed to reflect the adoption of a new pay scale that became effective January 1, 1994, and compressed the previous schedule of 35 steps to 20 steps. The new scale provides longevity increases for members who have at least one year of service. In addition, Act 1994-29 provided for a cost-of-living adjustment (COLA) to annuitants with an effective date of retirement on or prior to June 30, 1992.

In the valuation years ended December 31, 1996, 1995, 1993, and 1991, actual investment earnings exceeded the expected rates of return, thereby causing an increase in the valuation years' actuarial value of assets reported in the schedule of funding progress and reduction in the following years' annual required contribution reported in the schedule of employer contributions.

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